#9
1-30-04

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail, in an envelope addressed to: Commissioner for Patents, Washington, DC 20231, on the date shown below.

Dated: February 11, 2003 Signature: (Andrew T. Zidel)

Docket No.: SONYTA-3.3-139
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Asano et al.

Application No.: 09/937,120 Group Art Unit: 2131

Filed: December 17, 2001 Examiner: Not Yet Assigned

For: DATA PROCESSING APPARATUS AND
DATA PROCESSING METHOD

Commissioner for Patents
Washington, DC 20231

REQUEST TO AMEND DRAWINGS

Dear Sir:

Further to applicant's amendment dated February 11, 2003, permission is requested to amend the drawings of the above-identified application as indicated in red on the copy of the drawings attached hereto. By the requested changes, applicants seek to correct mislabeled elements, to add headings, and to correct typographical errors. Accordingly, applicants submit that none of these amendments will add new matter to the disclosure of the present application and, therefore, that these amendments should be enterable.

If the Examiner has any questions with respect to the proposed changes, he is invited to telephone the undersigned at (908) 654-5000. Additionally, if there are any fees due and owing, the Examiner is authorized to charge our Deposit Account No 12-1095 therefor.

Dated: February 11, 2003 Respectfully submitted,

By
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Patent Agent
Registration No.: 45,256
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KRUMHOLZ & MENTLIK, LLP
600 South Avenue West
Westfield, New Jersey 07090
(908) 654-5000
Attorneys for Applicant

414519_1.DOC

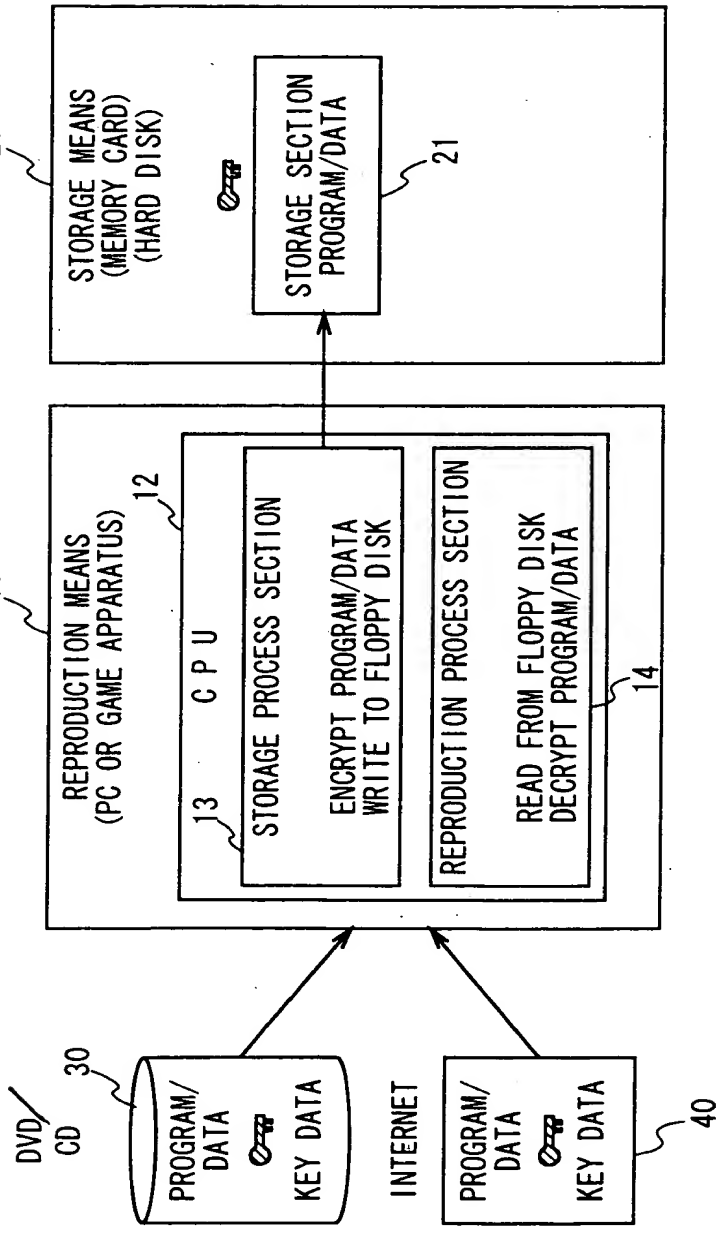


FIG. 1

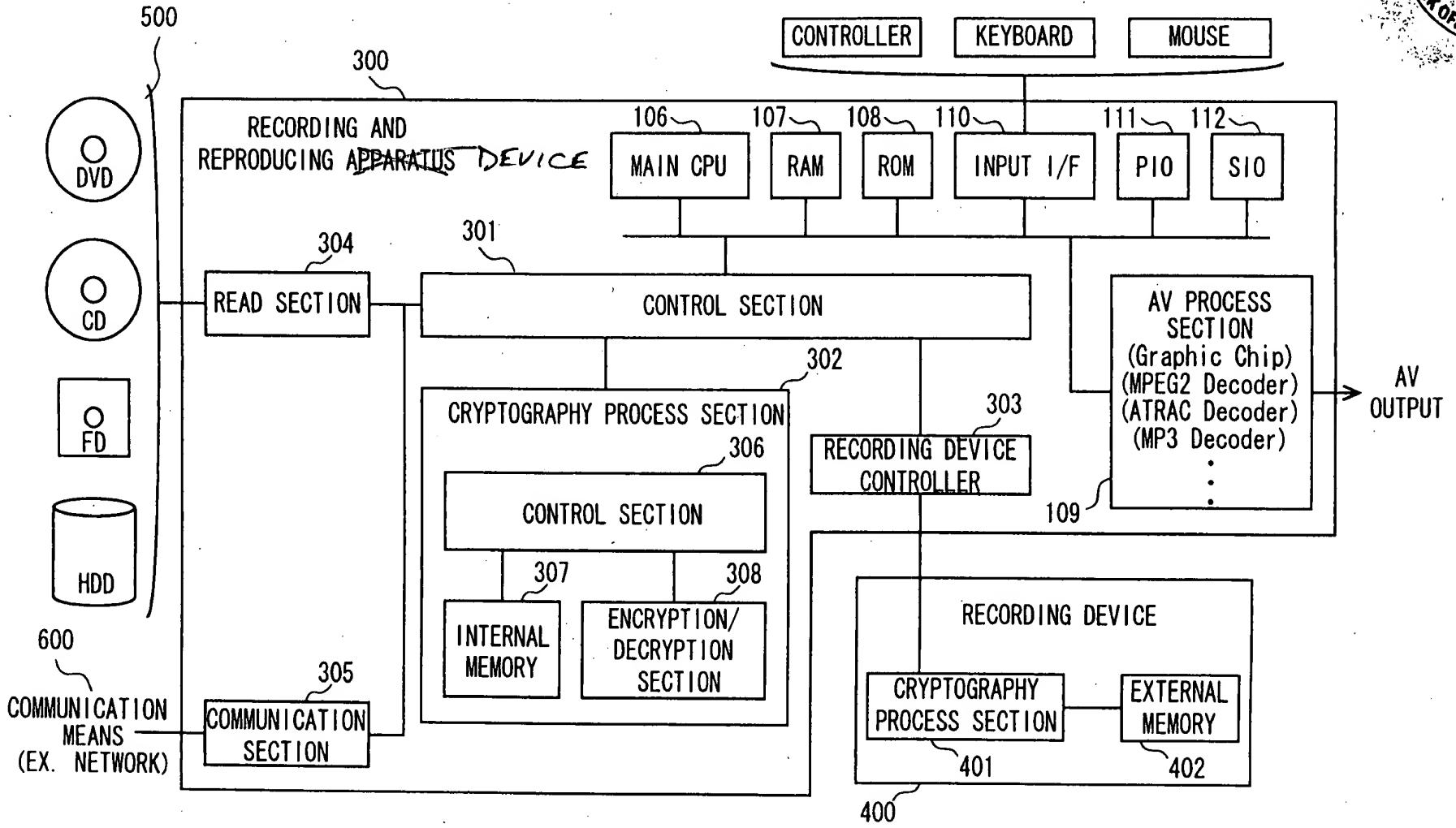


FIG. 2

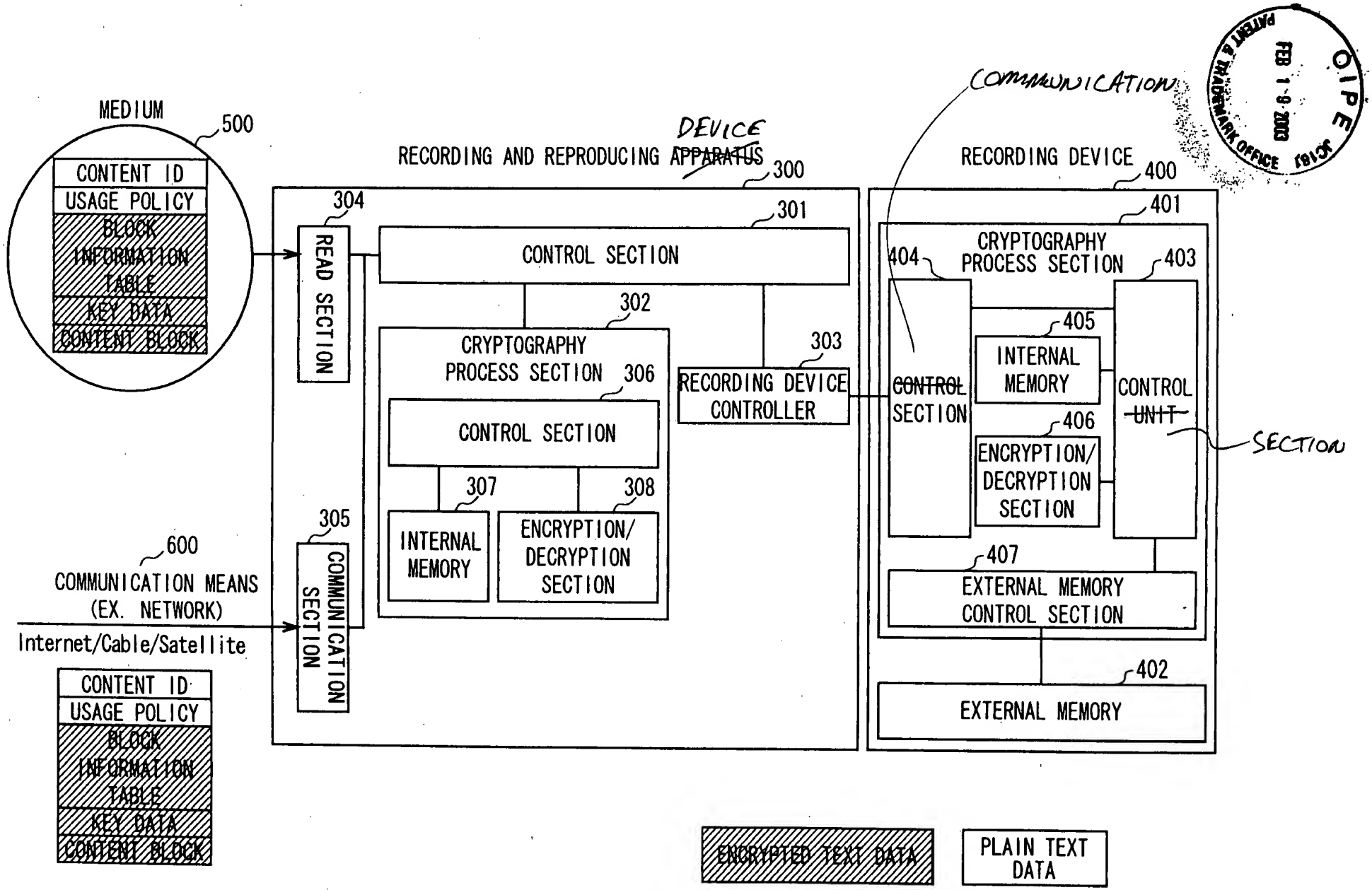
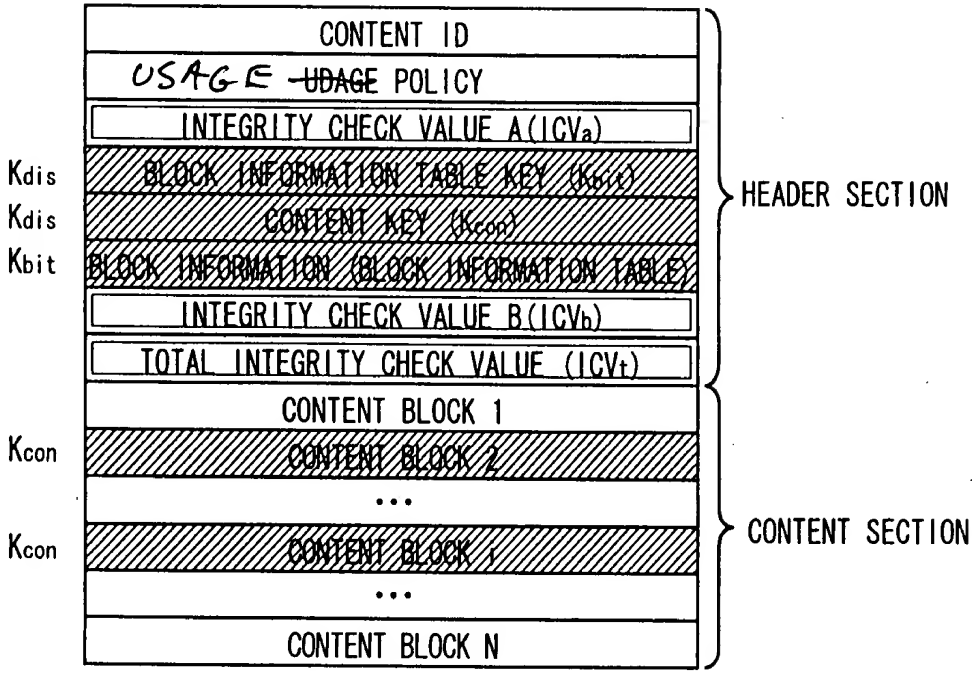
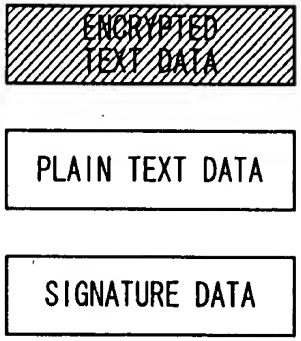

MEDIUM
500
CONTENT ID
USAGE POLICY
BLOCK INFORMATION TABLE
KEY DATA
CONTENT BLOCK
RECORDING AND REPRODUCING APPARATUS
300
304
READ SECTION
301
CONTROL SECTION
302
CRYPTOGRAPHY PROCESS SECTION
306
CONTROL SECTION
307
INTERNAL MEMORY
308
ENCRYPTION/ DECRYPTION SECTION
303
RECORDING DEVICE CONTROLLER
305
COMMUNICATION SECTION
600
COMMUNICATION MEANS (EX. NETWORK)
Internet/Cable/Satellite
CONTENT ID
USAGE POLICY
BLOCK INFORMATION TABLE
KEY DATA
CONTENT BLOCK
RECORDING DEVICE
400
401
CRYPTOGRAPHY PROCESS SECTION
404
CONTROL SECTION
405
INTERNAL MEMORY
406
ENCRYPTION/ DECRYPTION SECTION
403
CONTROL UNIT
407
EXTERNAL MEMORY CONTROL SECTION
402
EXTERNAL MEMORY
ENCRYPTED TEXT DATA
PLAIN TEXT DATA

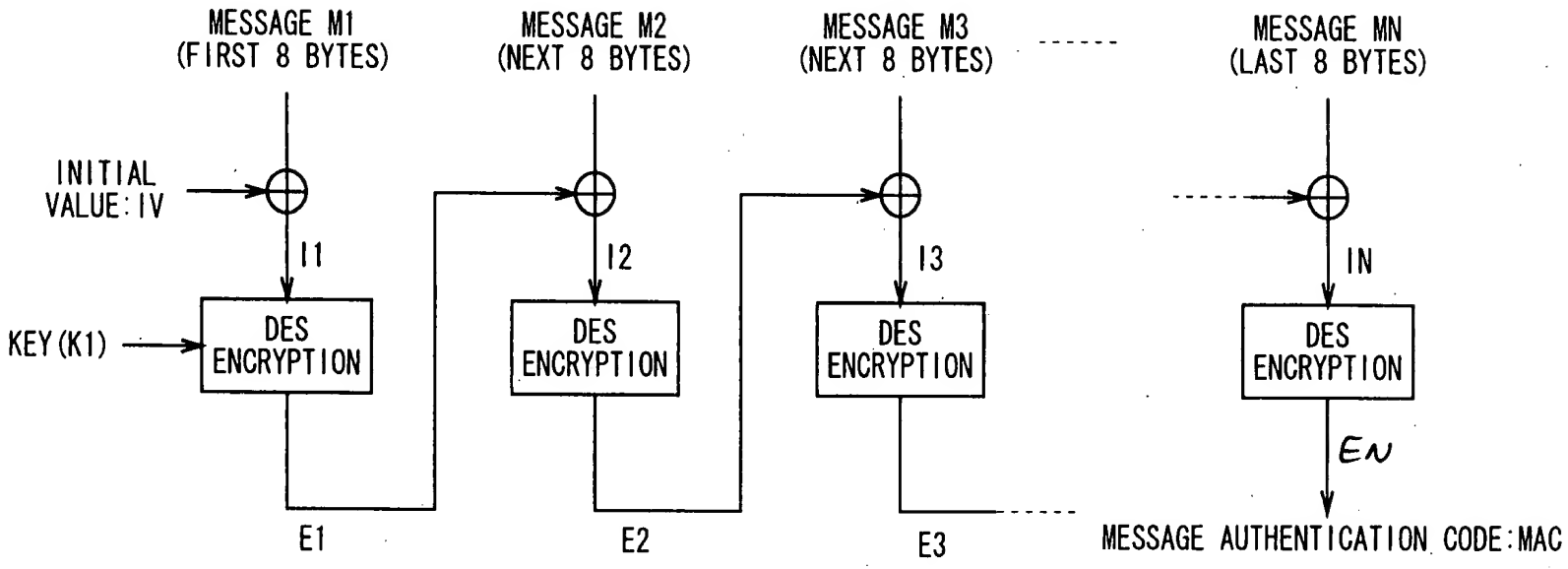
FIG. 3





DATA FORMAT ON MEDIUM AND COMMUNICATION PATH

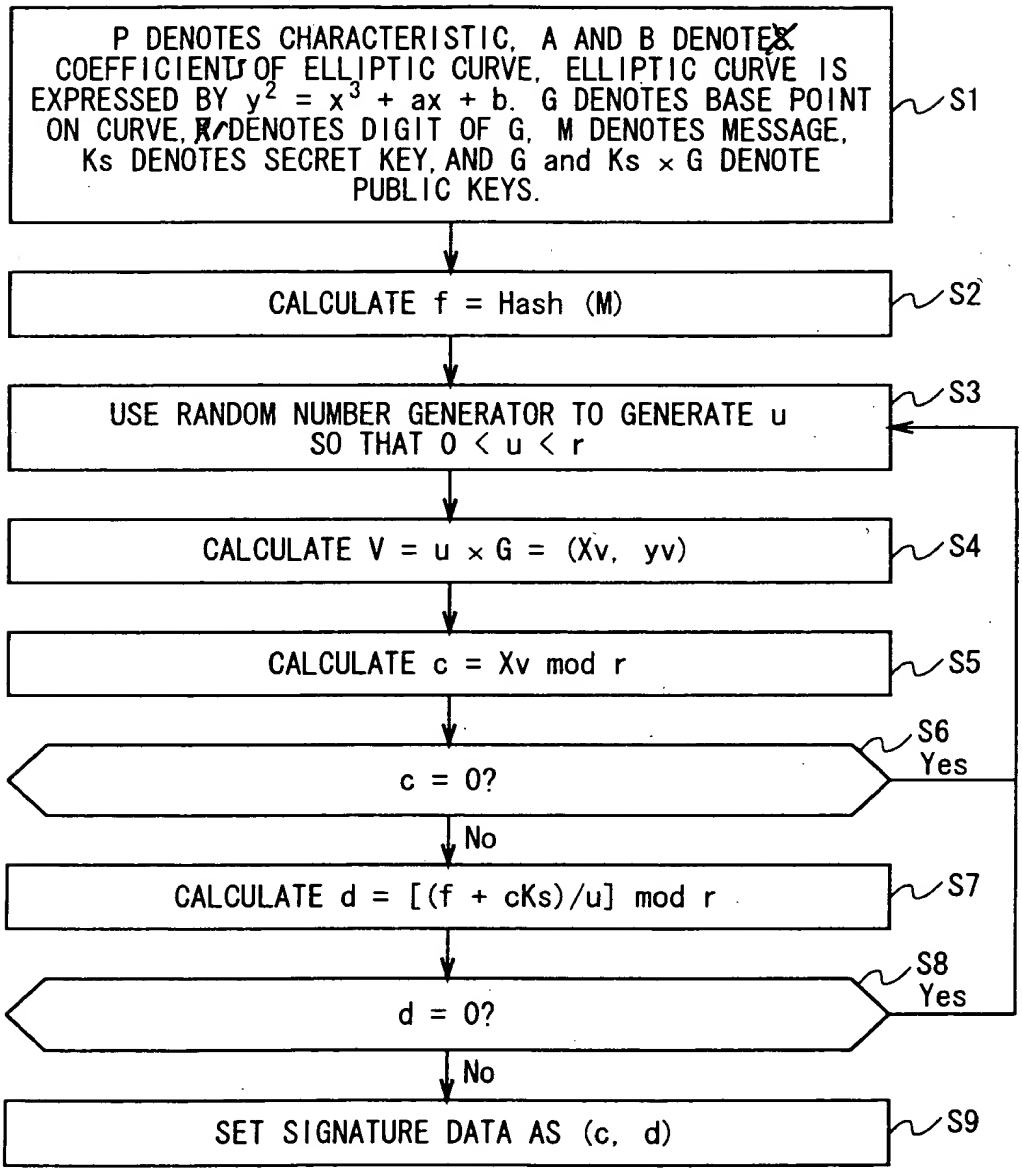
FIG. 4



⊕: EXCLUSIVE OR (XOR) PROCESS (8-BYTE UNIT)

FIG. 7

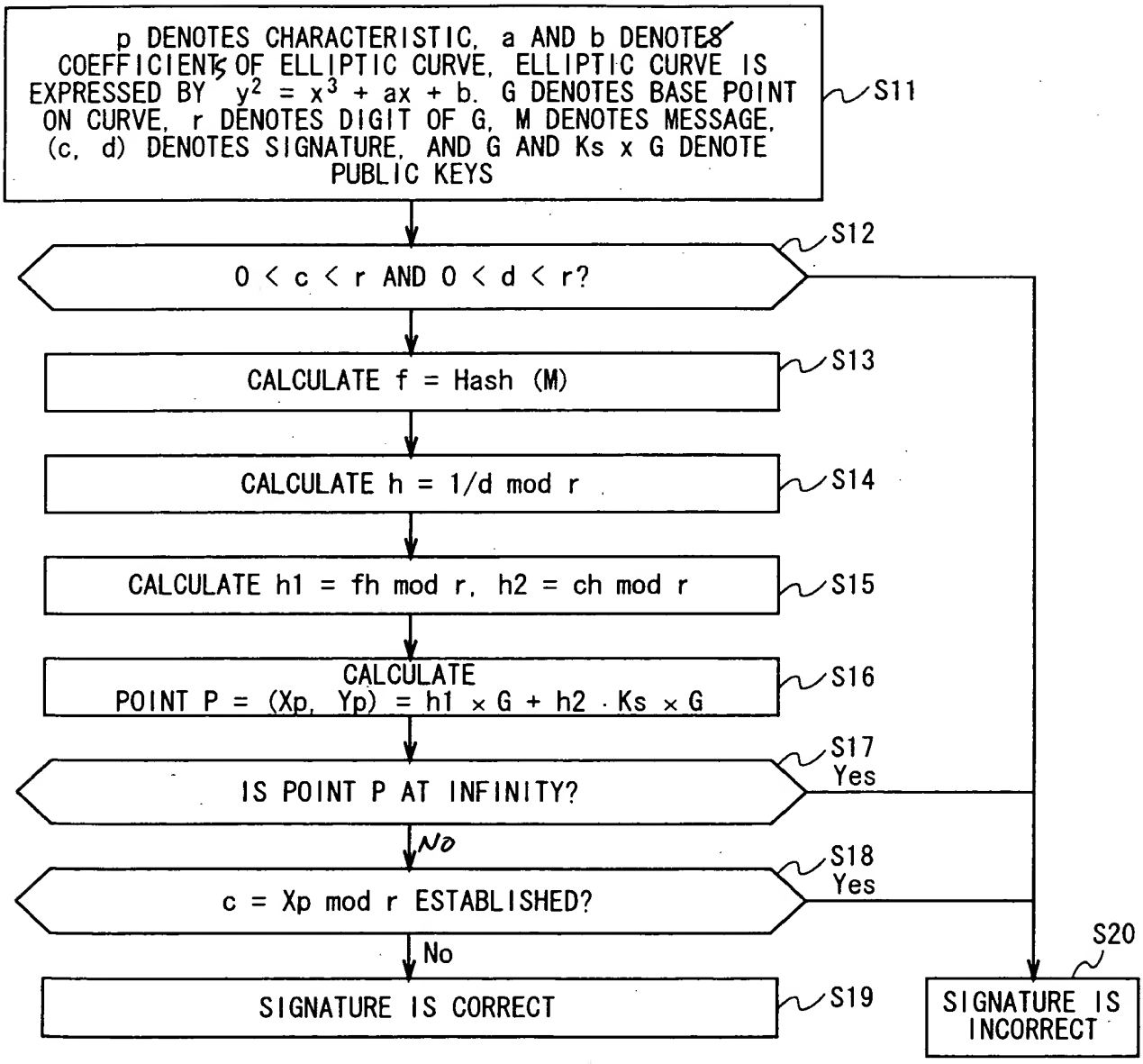
SIGNATURE GENERATION



GENERATION OF SIGNATURE (IEEE P1363/D3)

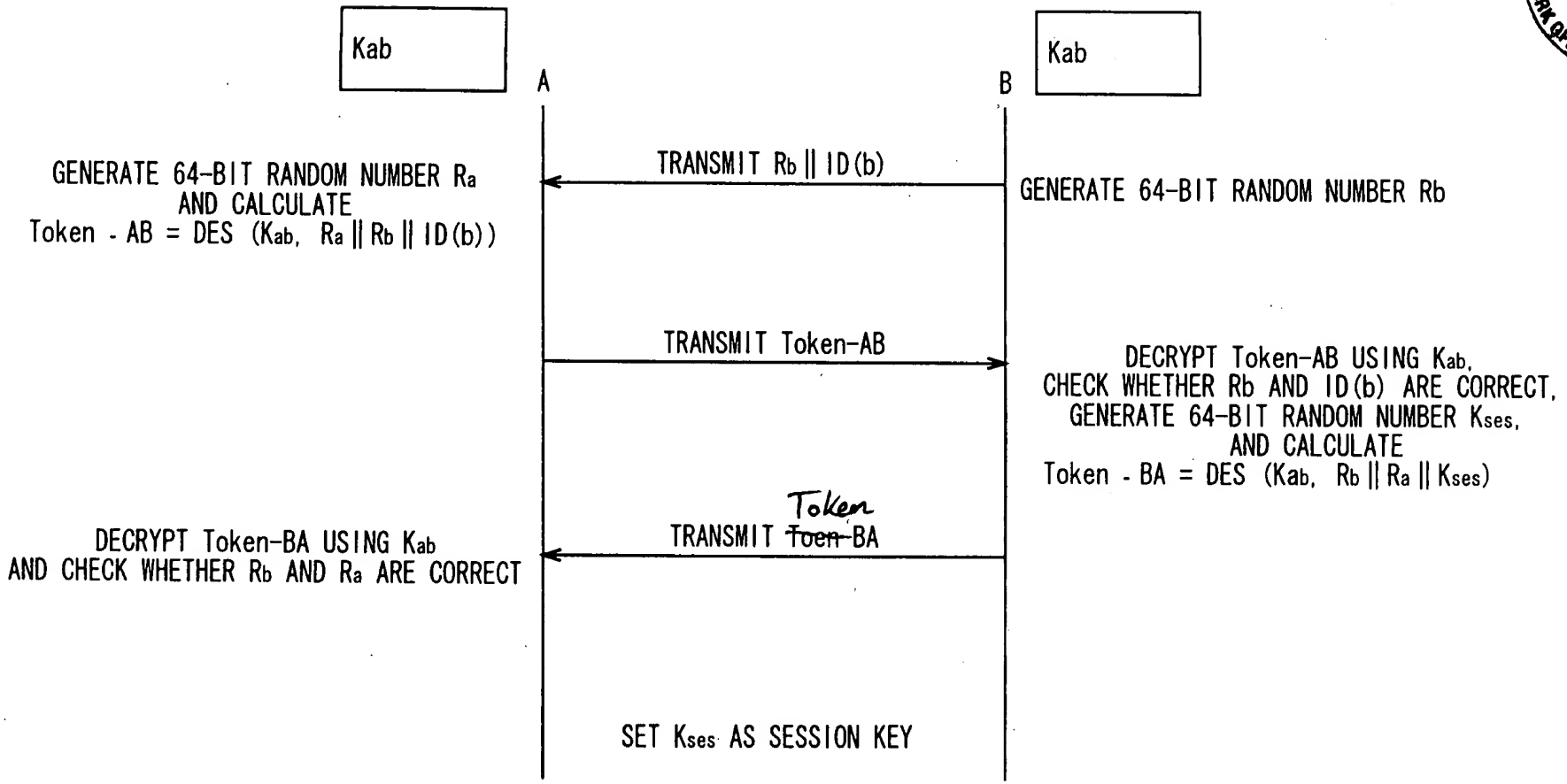
FIG. 11

SIGNATURE VERIFICATION



SIGNATURE VERIFICATION(IEEE P1363/D3)

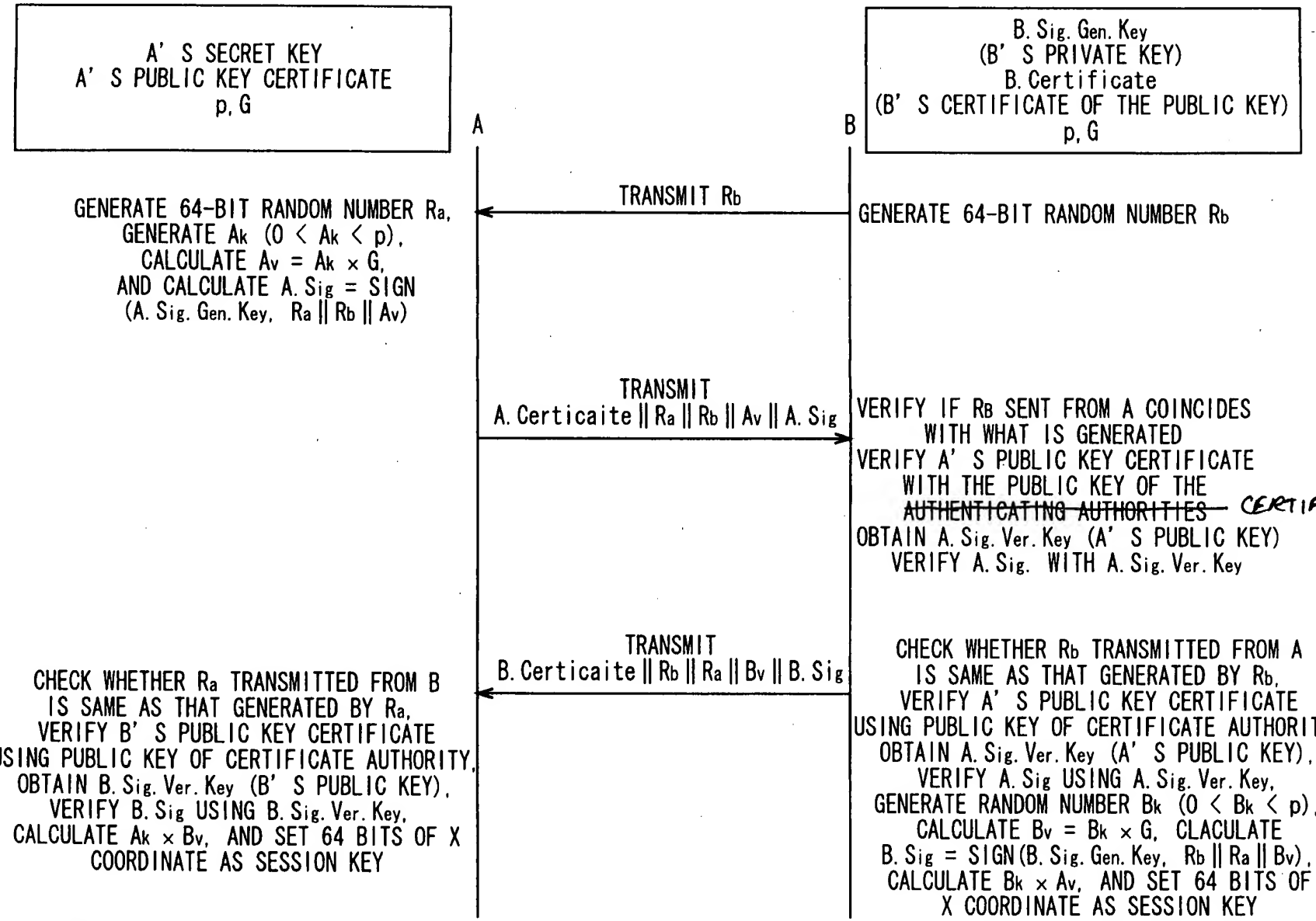
FIG. 12



13/93

ISO/IEC 9798-2 MUTUAL AUTHENTICATION AND KEY SHARING METHOD USING SYMMETRICAL KEY CRYPTOGRAPHY TECHNIQUE

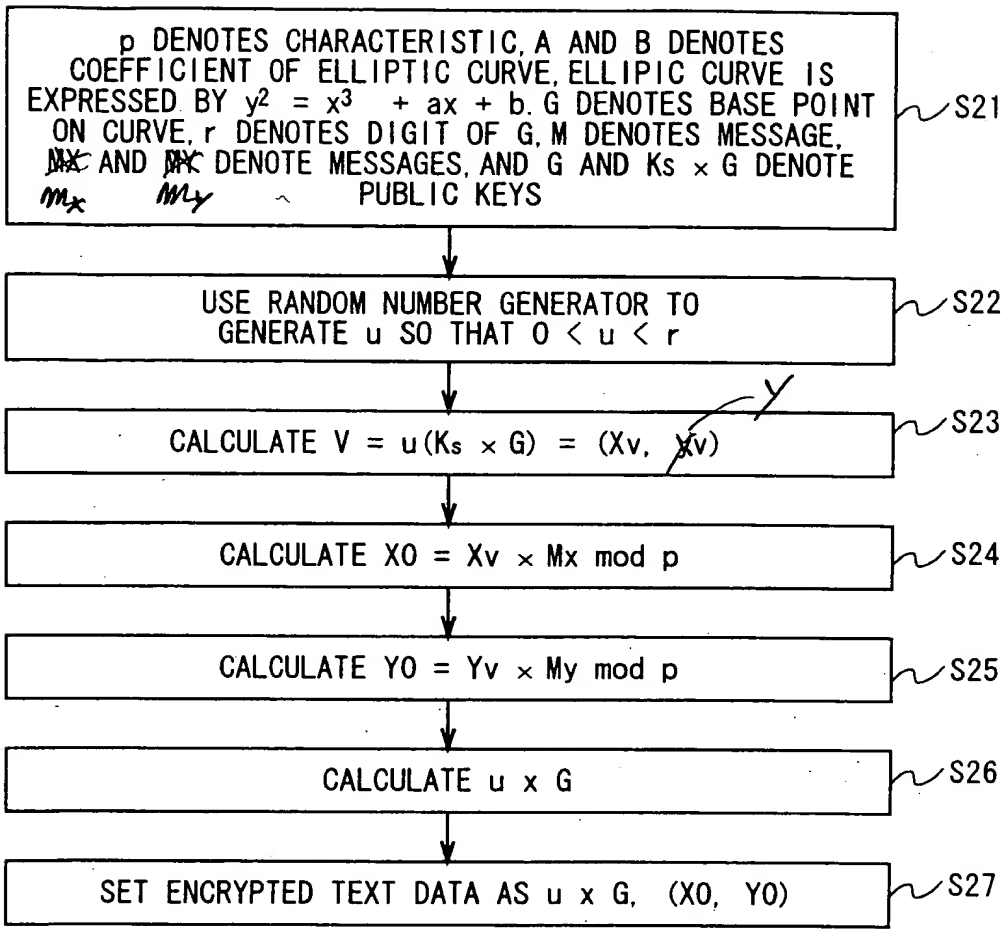
FIG. 13



ISO/IEC 9798-3 MUTUAL AUTHENTICATION AND KEY SHARING METHOD USING SYMMETRICAL KEY CRYPTOGRAPHY TECHNIQUE

FIG. 15

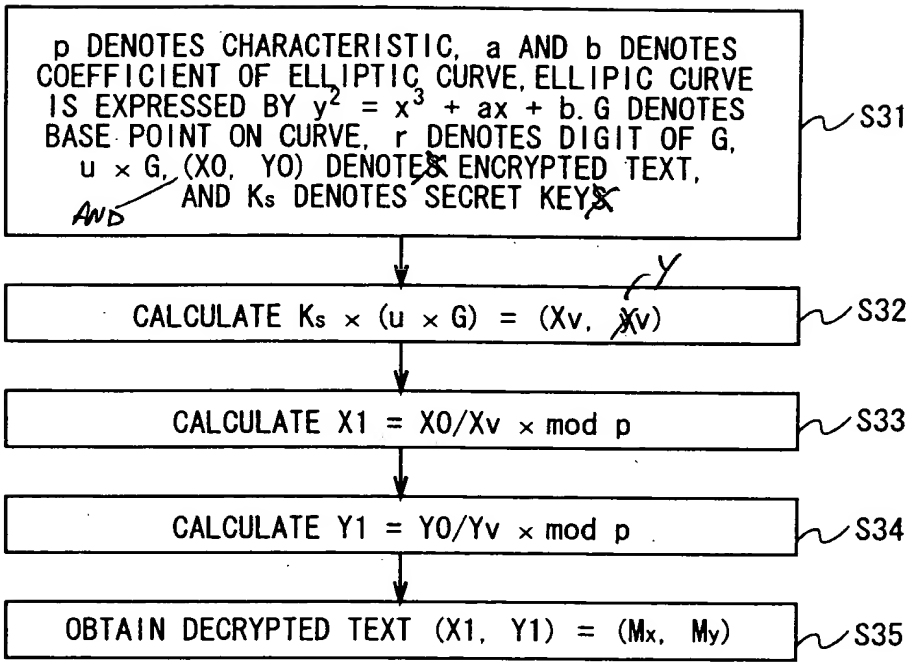
ENCRYPTION



ENCRYPTION USING ELLIPTIC CURVE CRYPTOGRAPHY (MENEZES-VANSTONE)

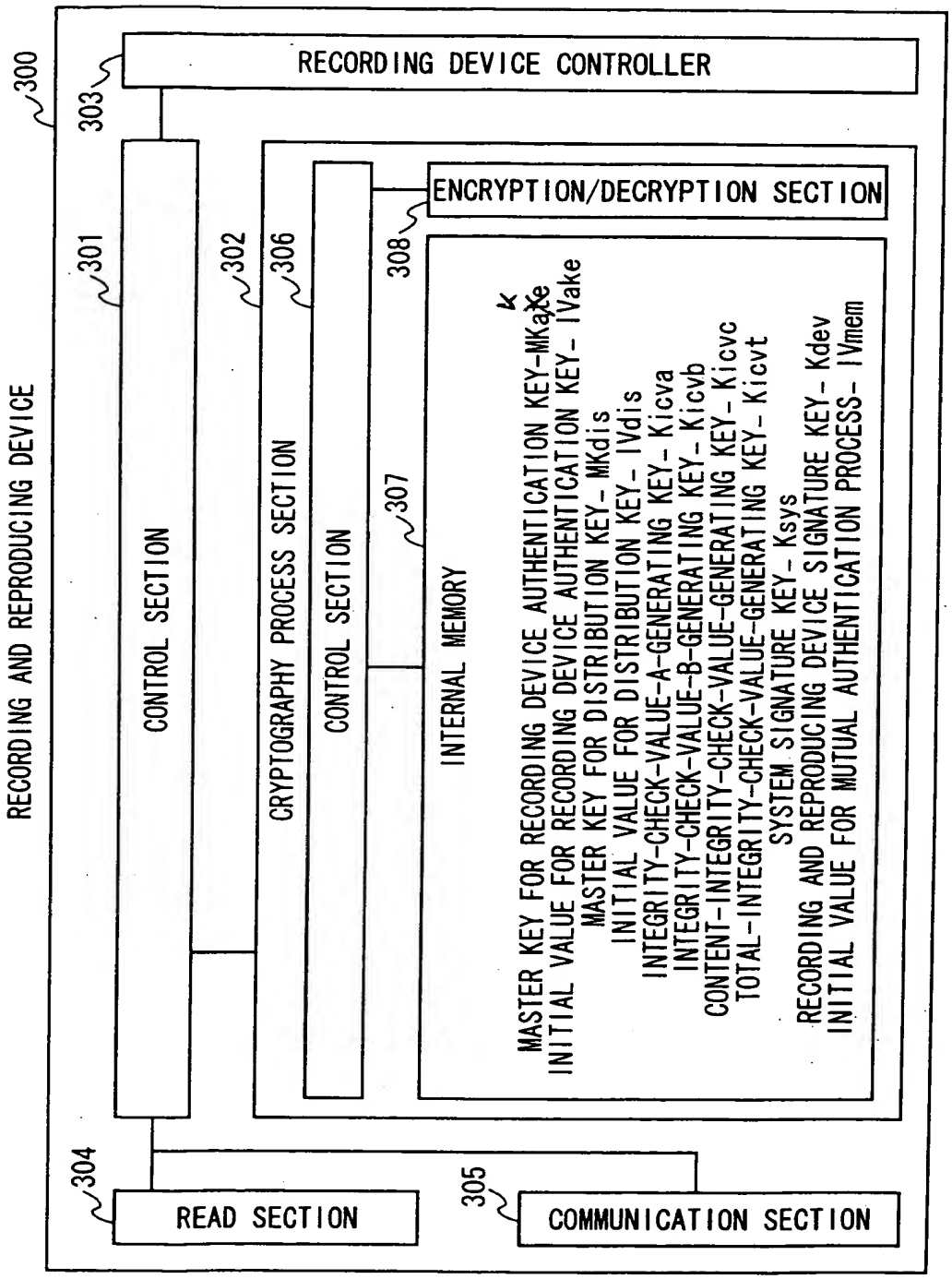
FIG. 16

DECRYPTION



DECRYPTION USING ELLIPTIC CURVE CRYPTOGRAPHY (MENEZES-VANSTONE)

FIG. 17



HOW DATA ARE HELD ON RECORDING AND REPRODUCING DEVICE

FIG. 18

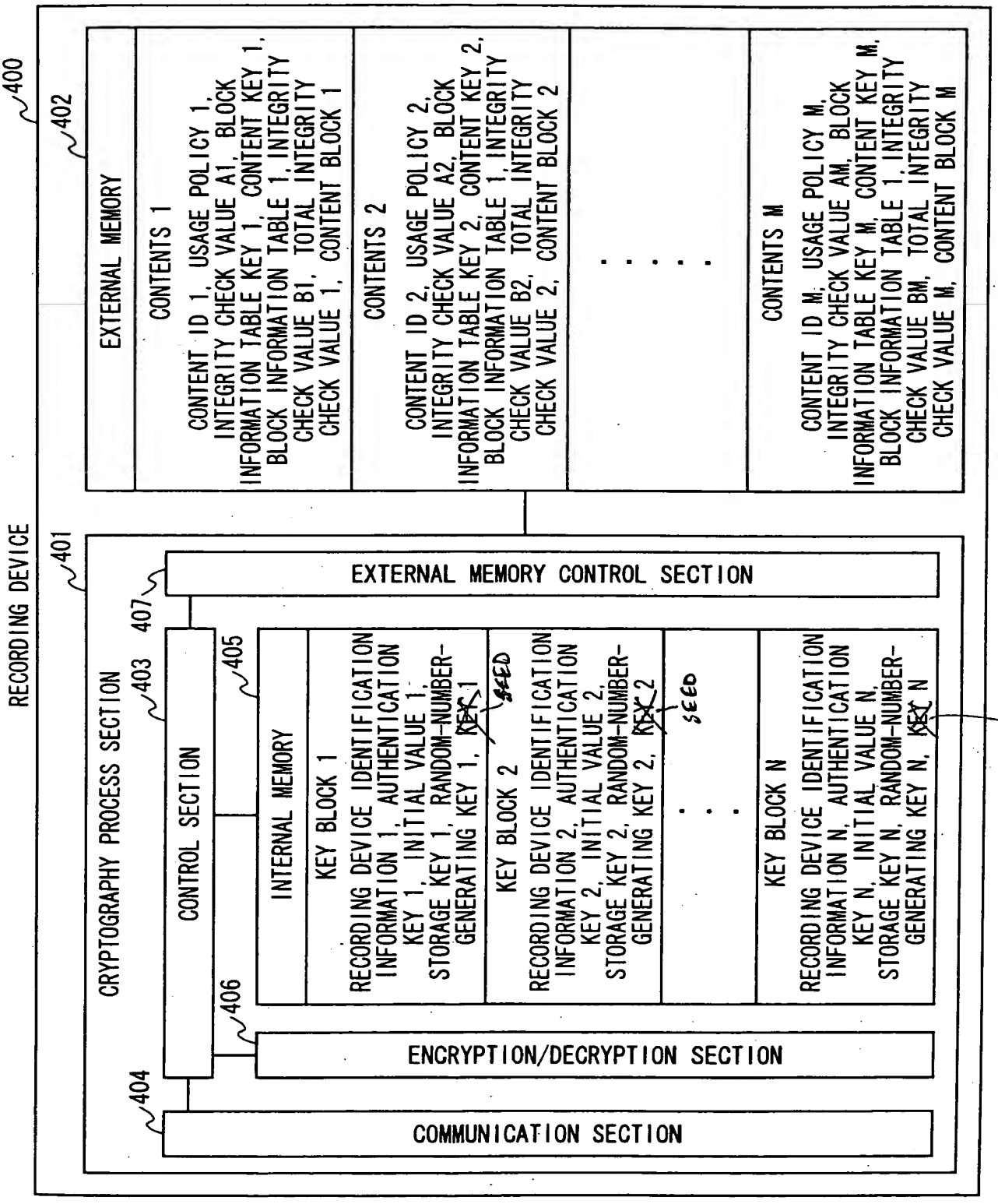
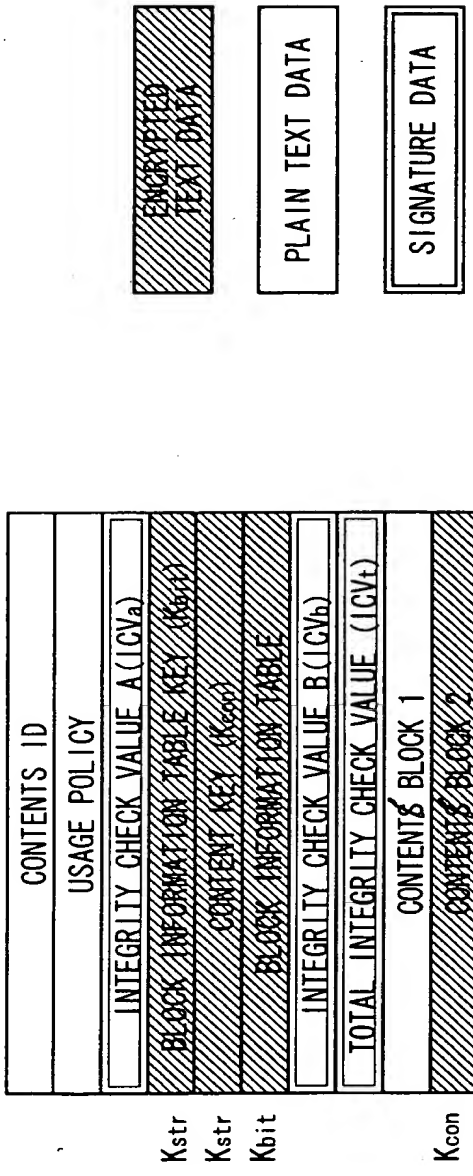


FIG. 19



CONTENT STORED IN RECORDING DEVICE
(LOCALIZATION FIELD = 0)

FIG. 26

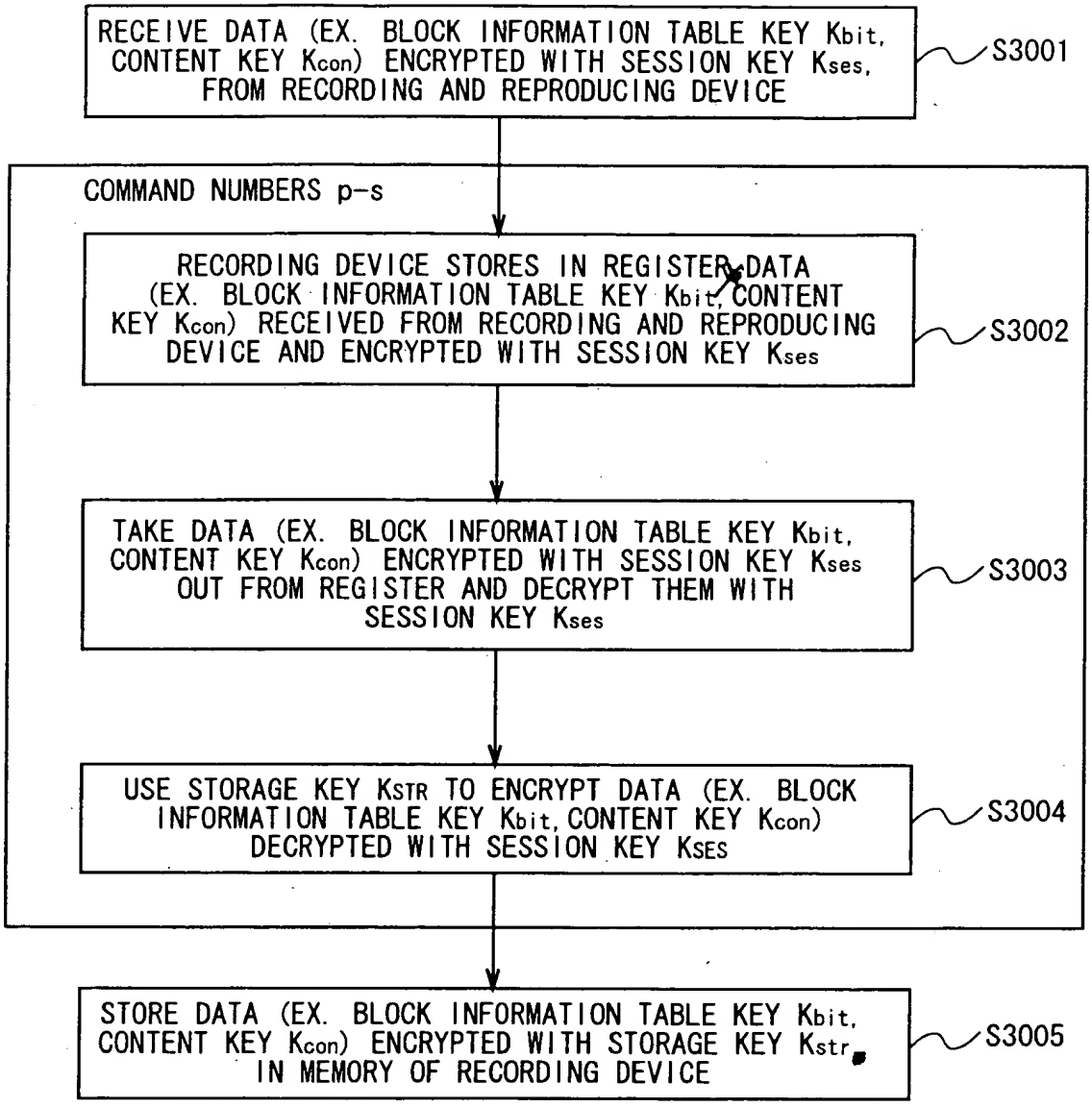


FIG. 30

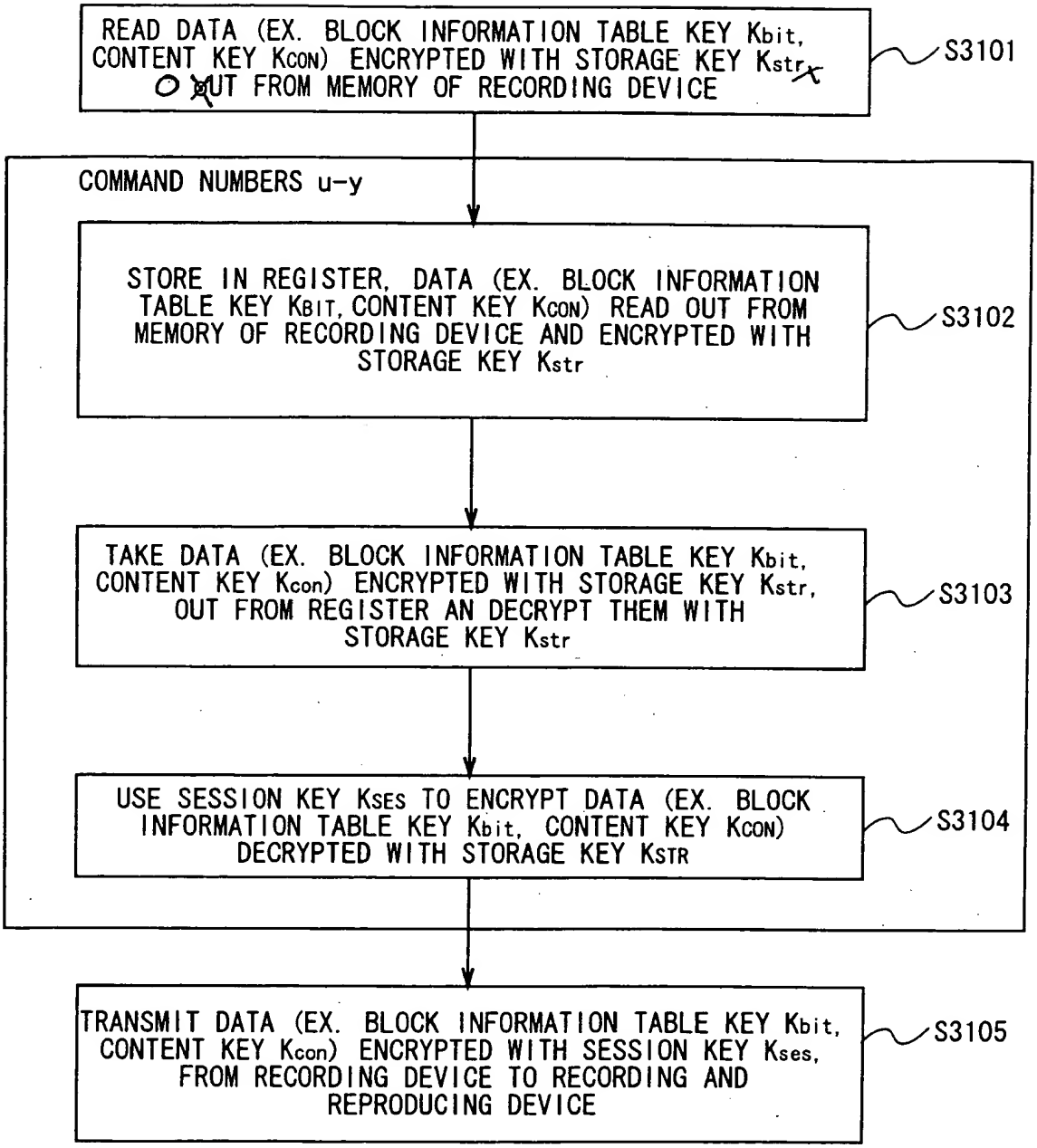
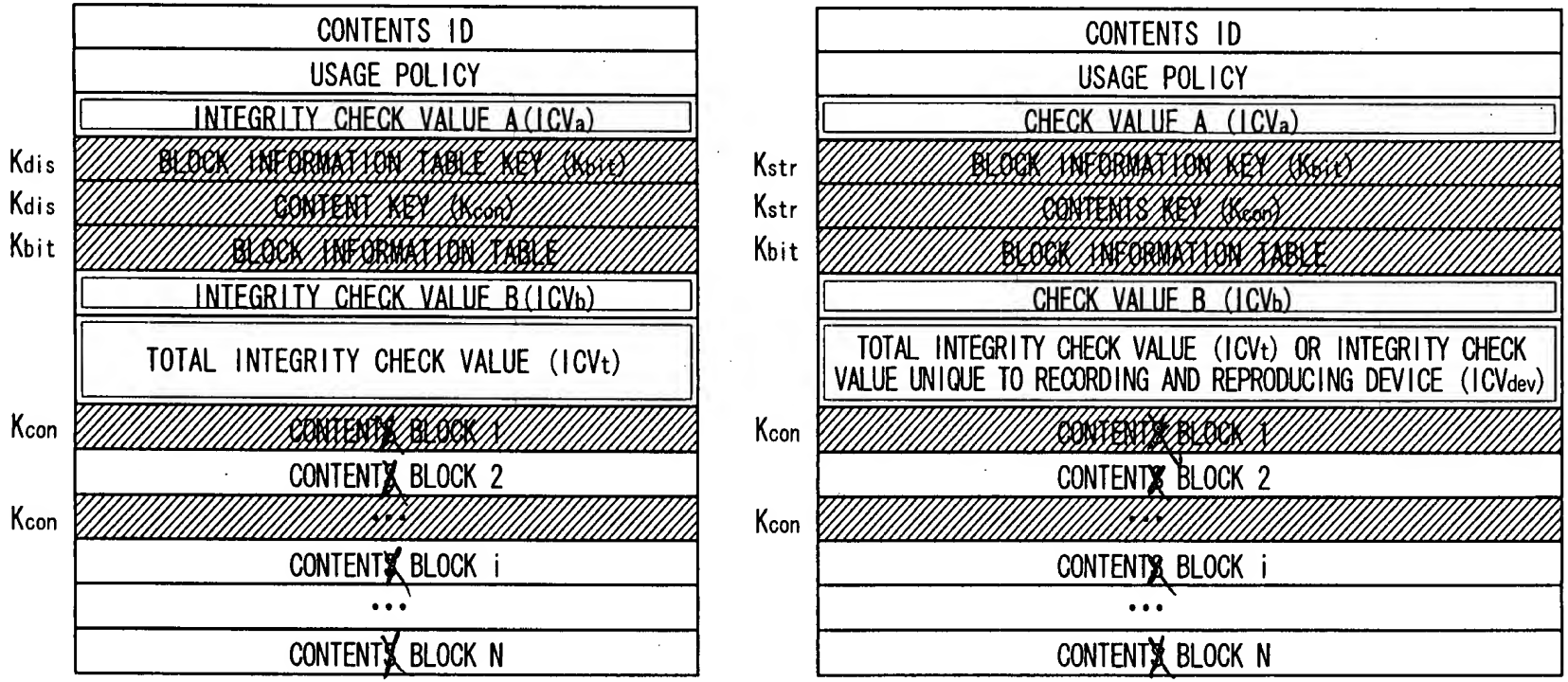


FIG. 31

FORMAT TYPE 0



DATA FORMAT ON MEDIUM AND COMMUNICATION PATH

CONTENT STORED IN RECORDING DEVICE

ENCRYPTED TEXT DATA

PLAIN TEXT DATA

SIGNATURE DATA

FIG. 32

FORMAT TYPE 1

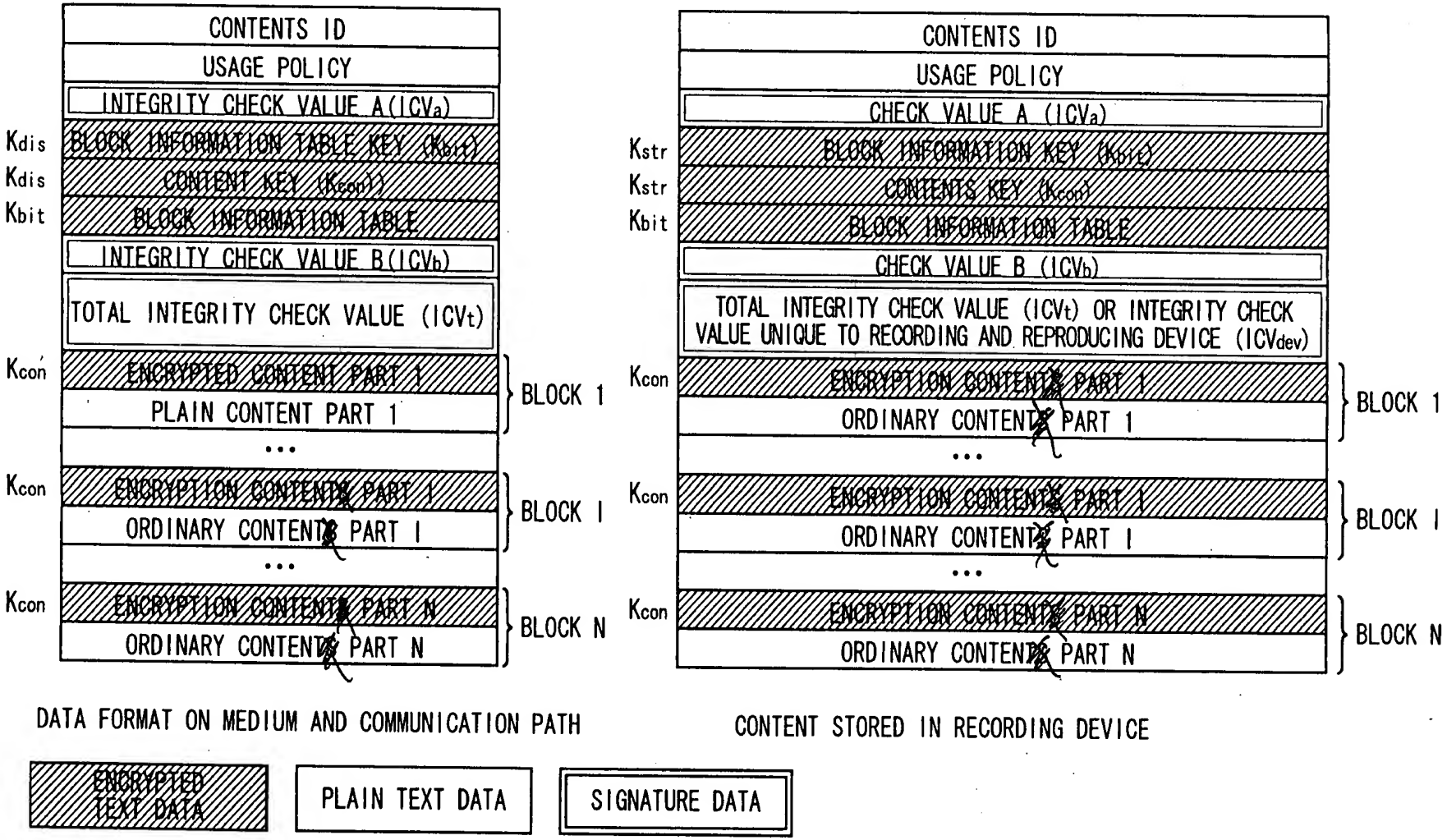


FIG. 33

FORMAT TYPE 2

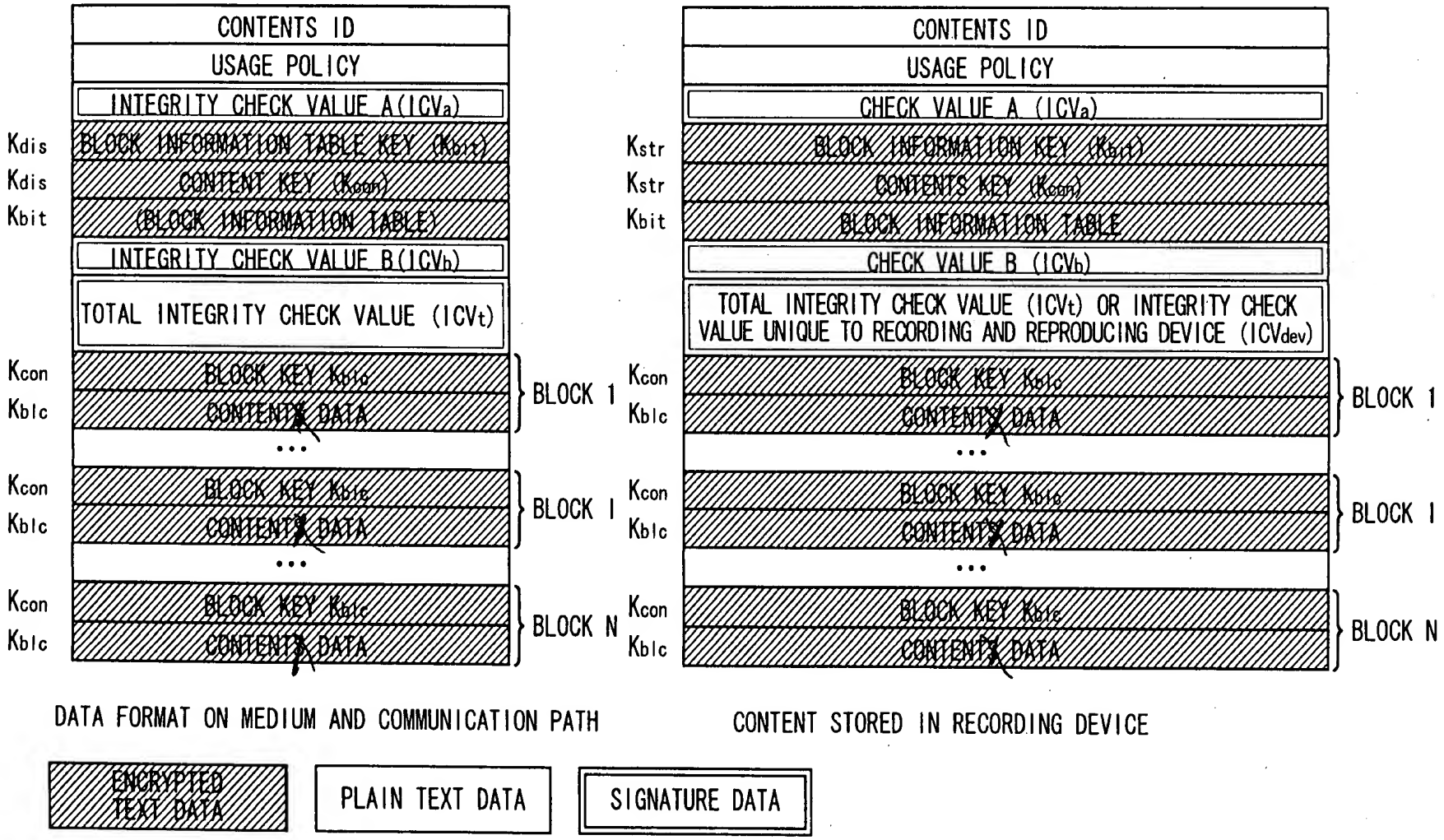


FIG. 34

FORMAT TYPE 3

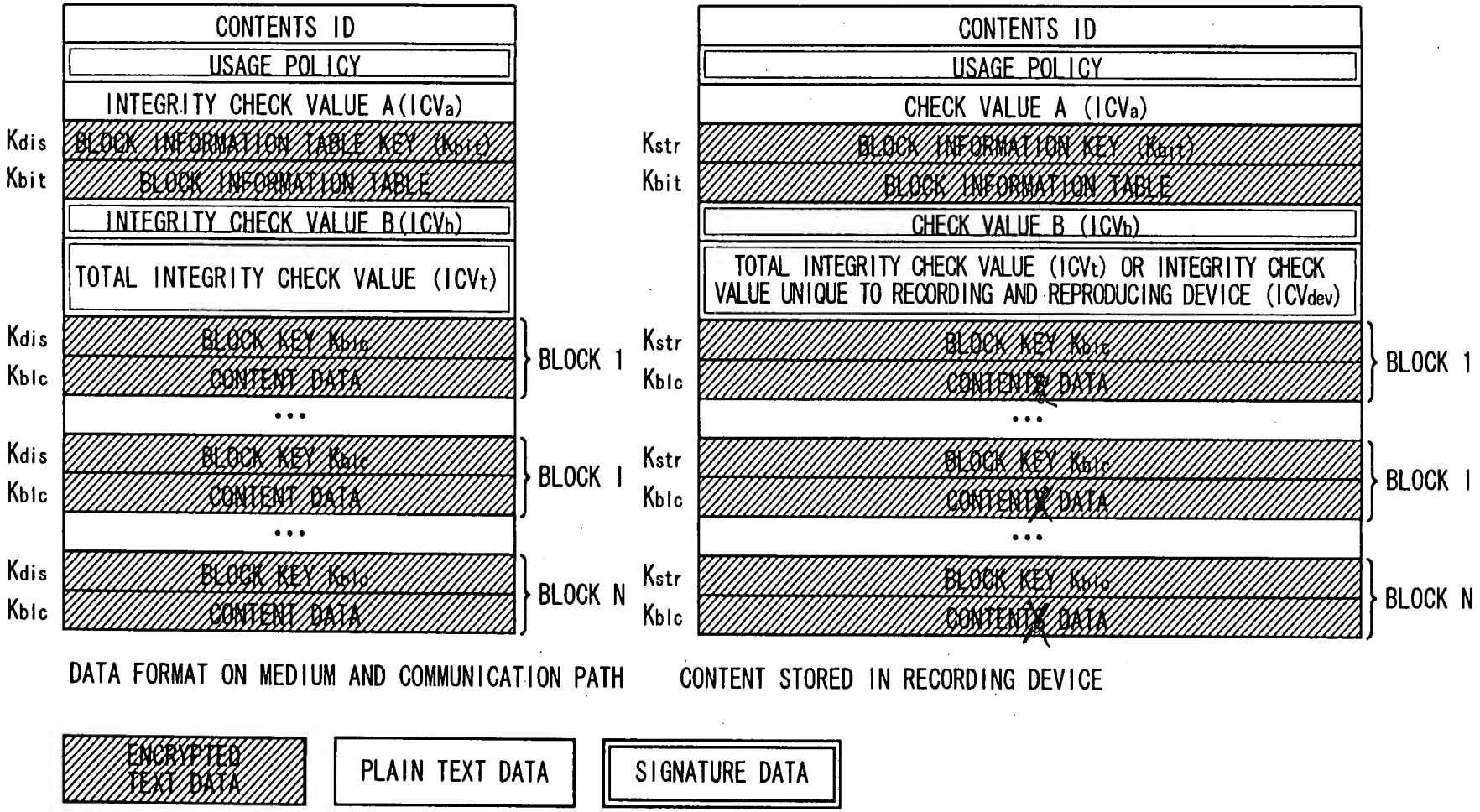


FIG. 35

FORMAT TYPE 2 DOWNLOAD PROCESS

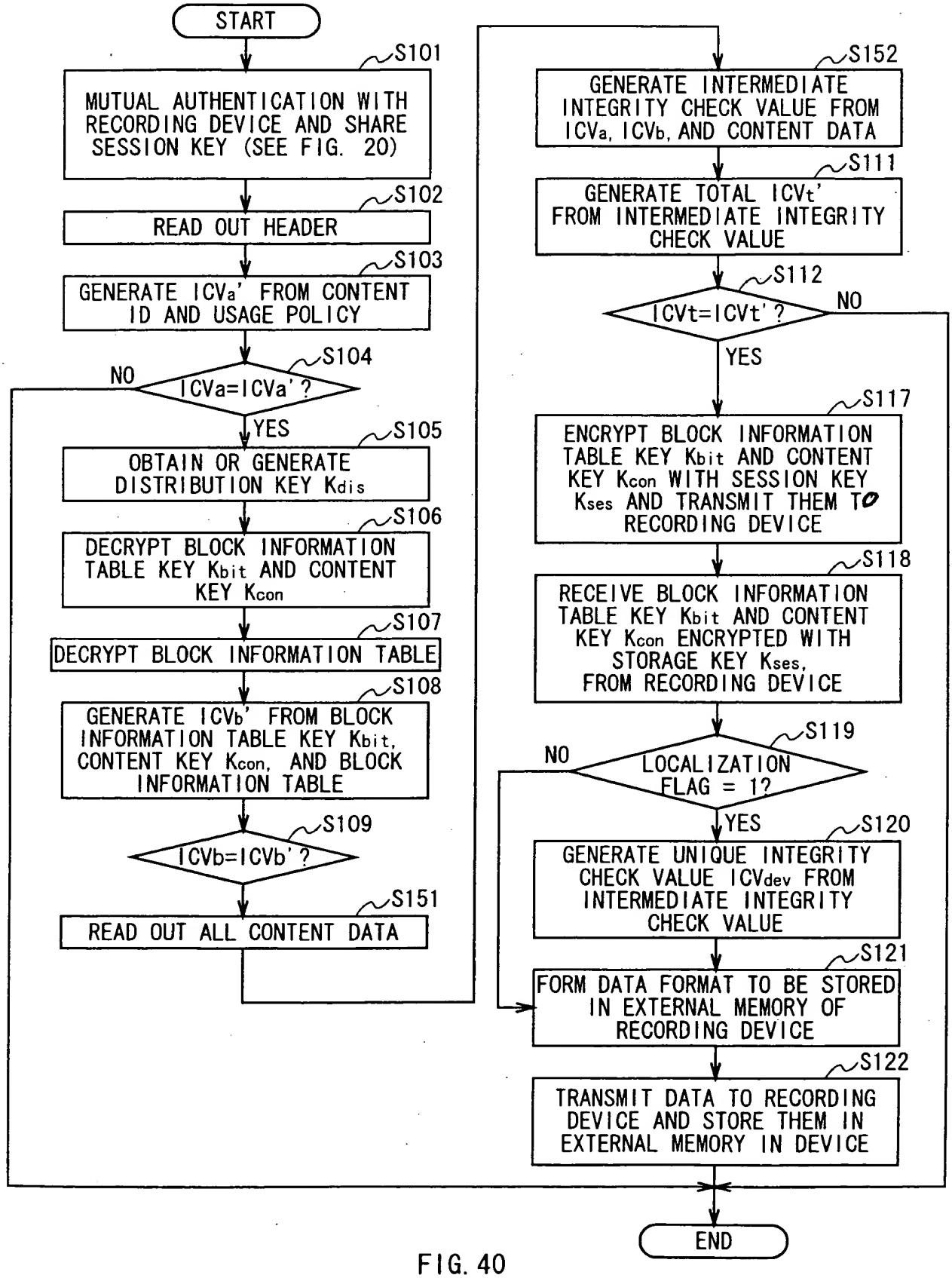


FIG. 40

FORMAT TYPE 1 REPRODUCTION PROCESS

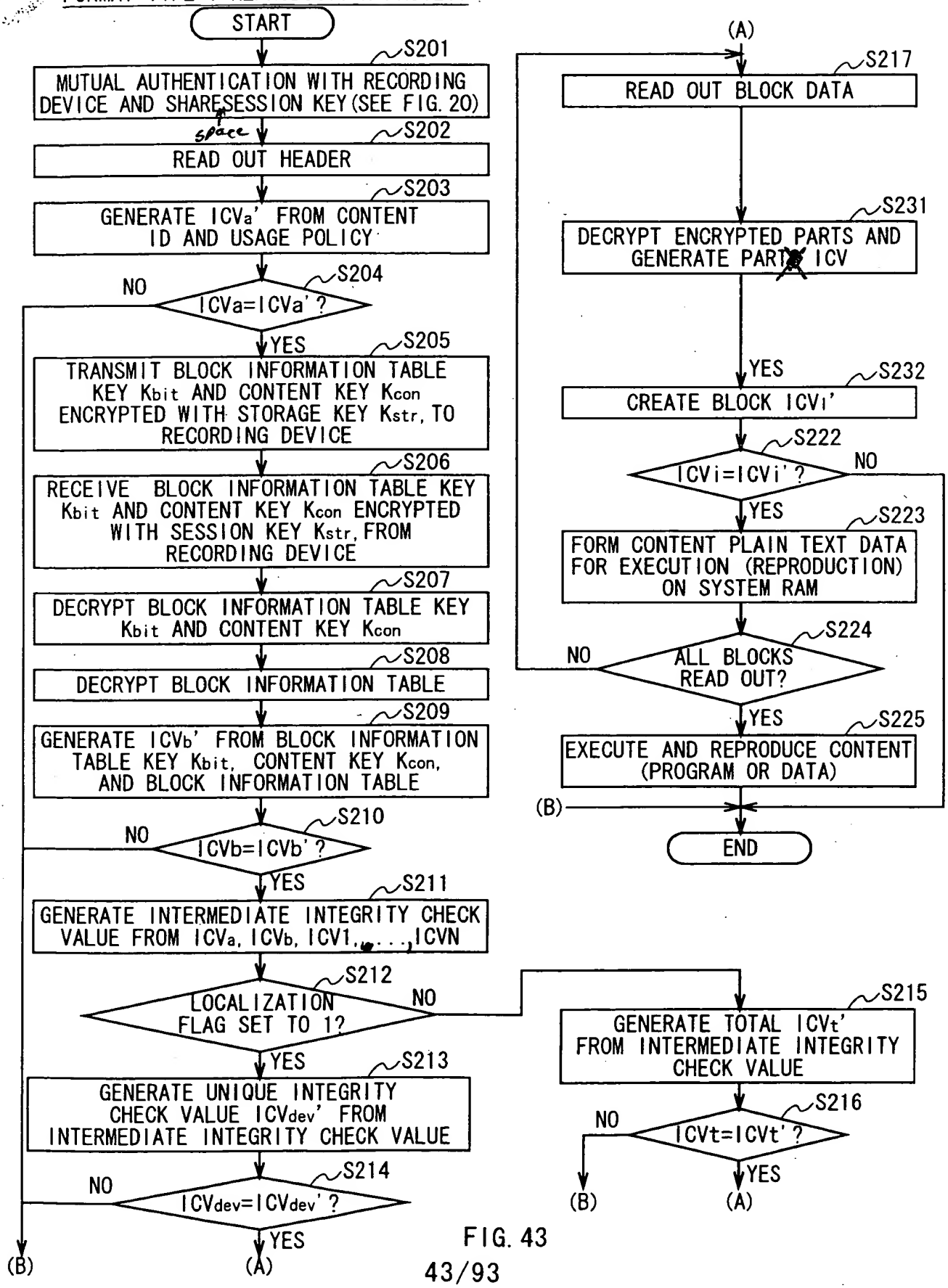


FIG. 43

FORMAT TYPE 2 REPRODUCTION PROCESS

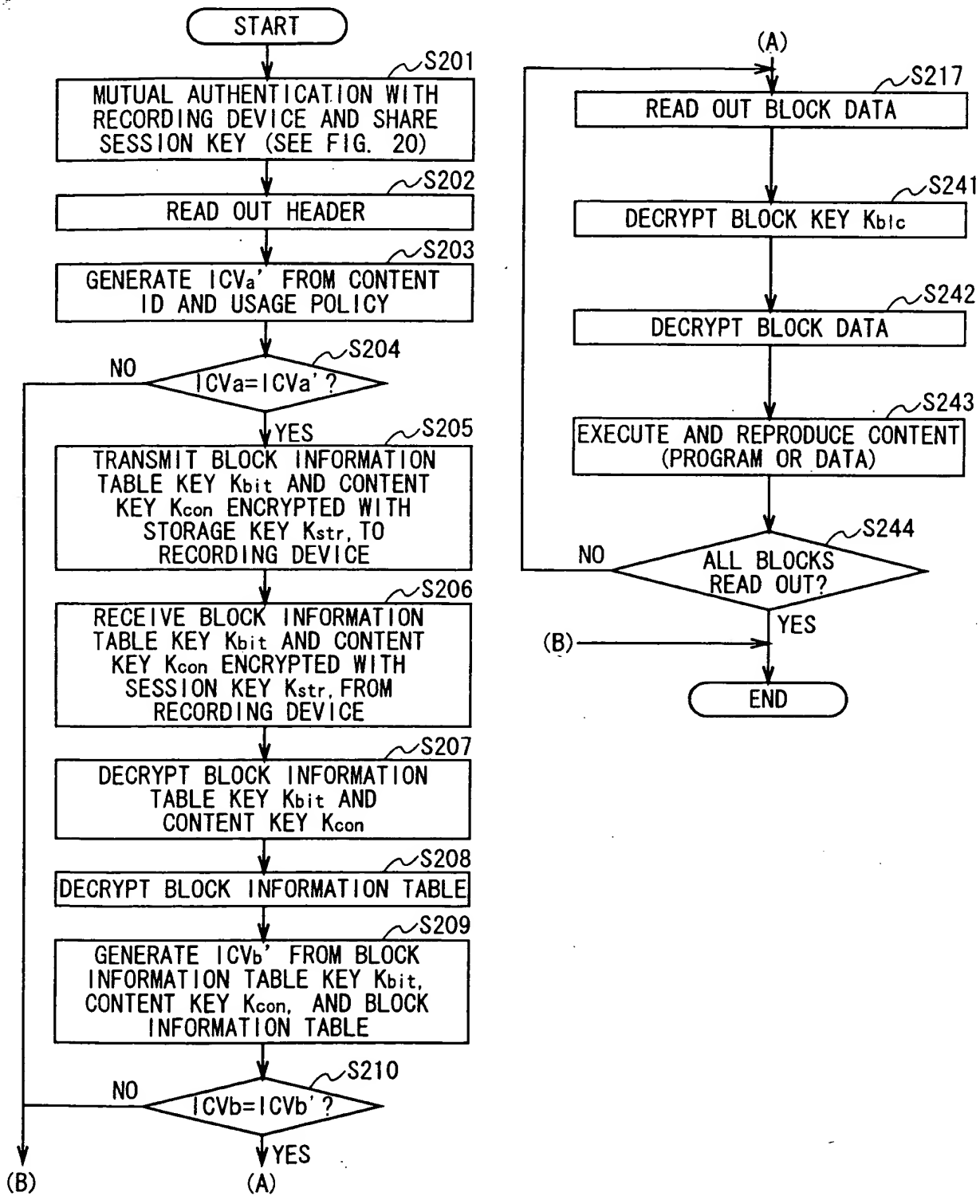


FIG. 44

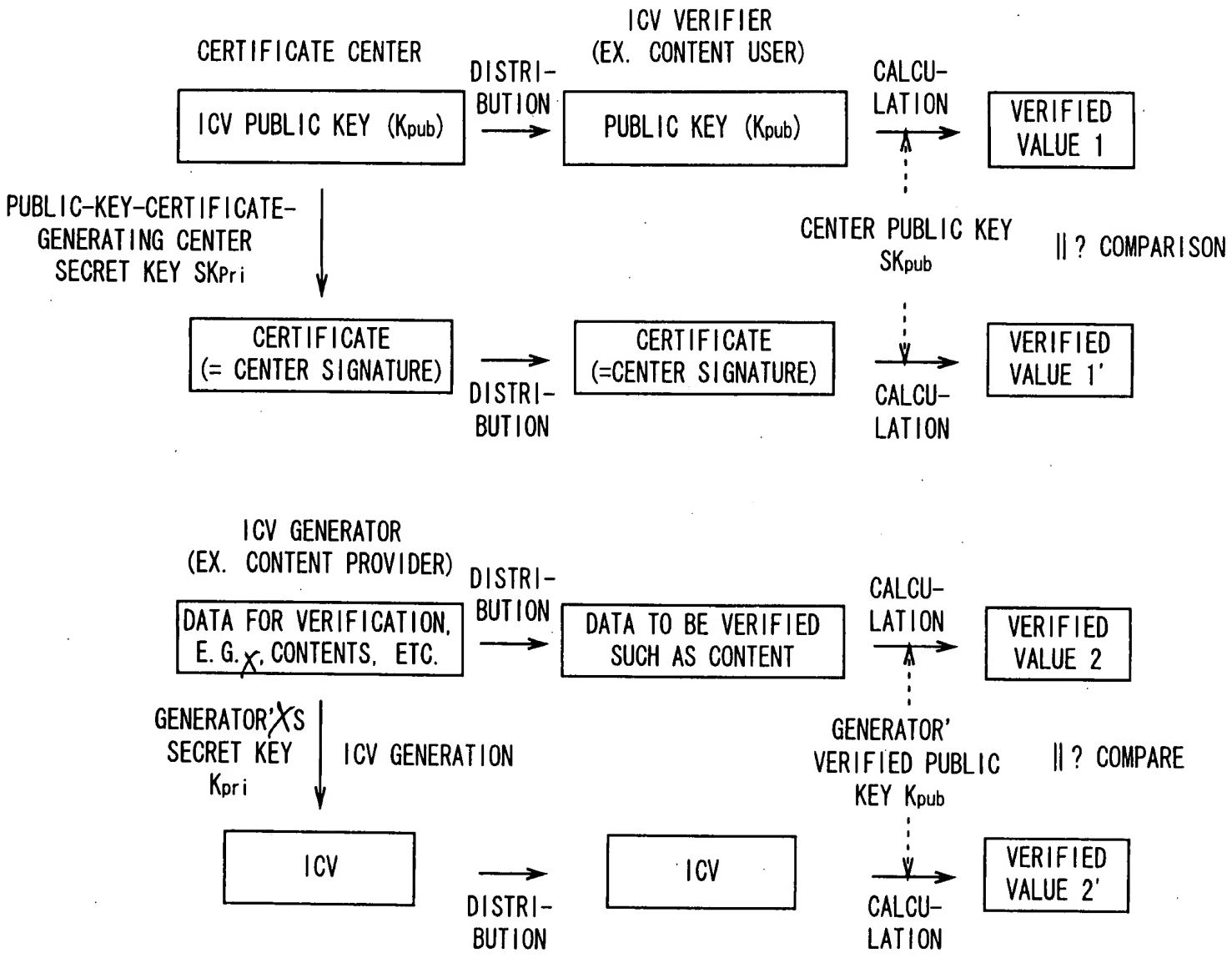
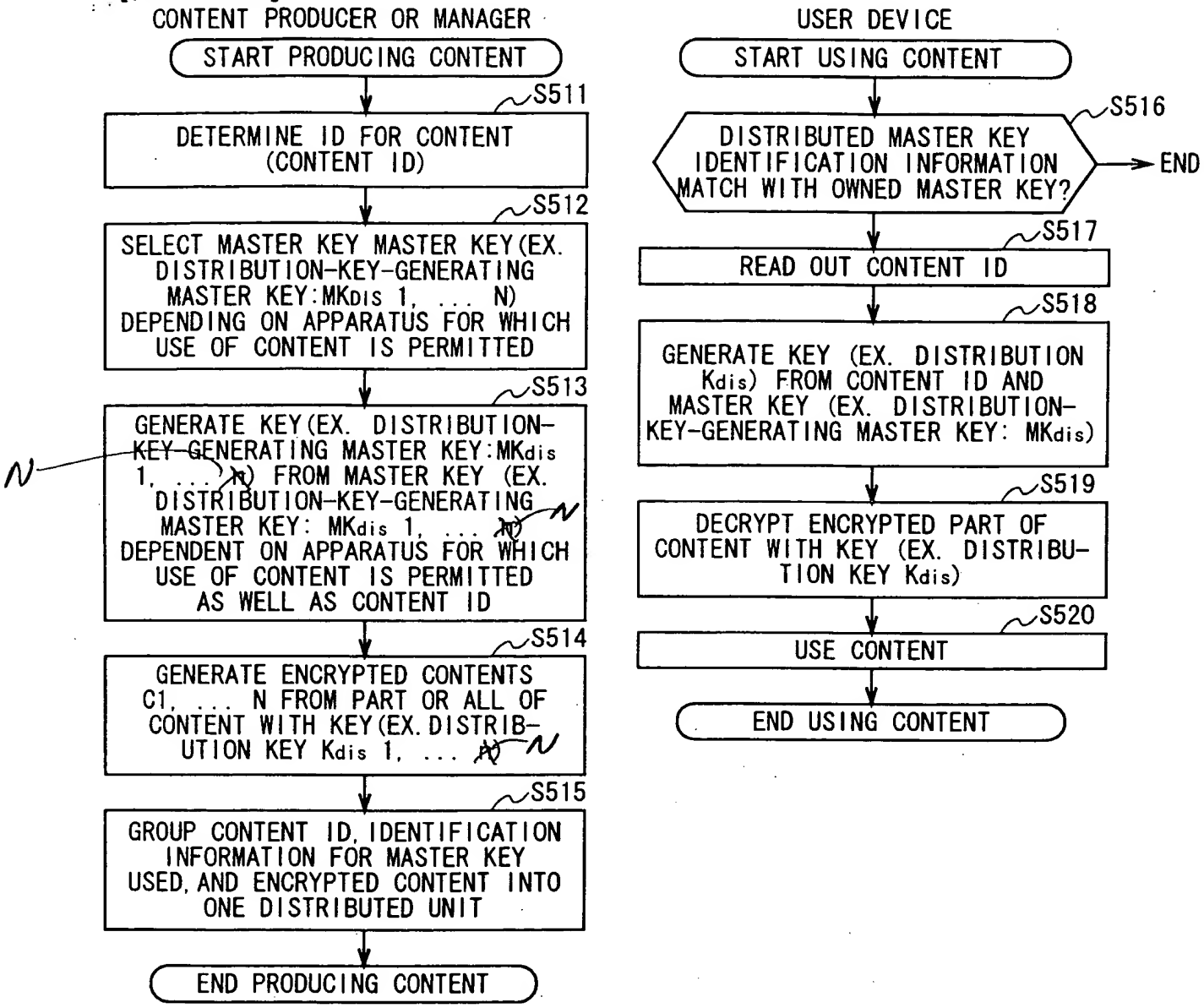


FIG. 48

METHOD FOR GENERATING INDIVIDUAL KEY FROM MASTER KEY -(2)

[BASIC FLOW]



[KEY OWNER CONFIGURATION]

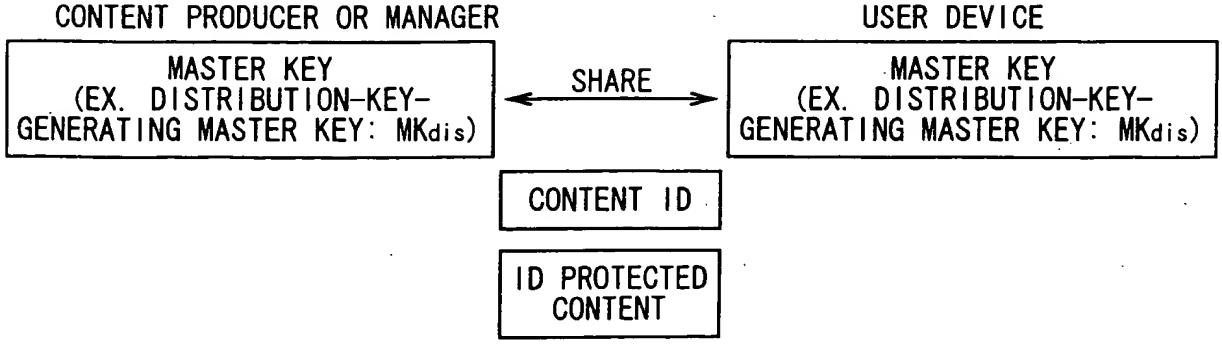


FIG. 51

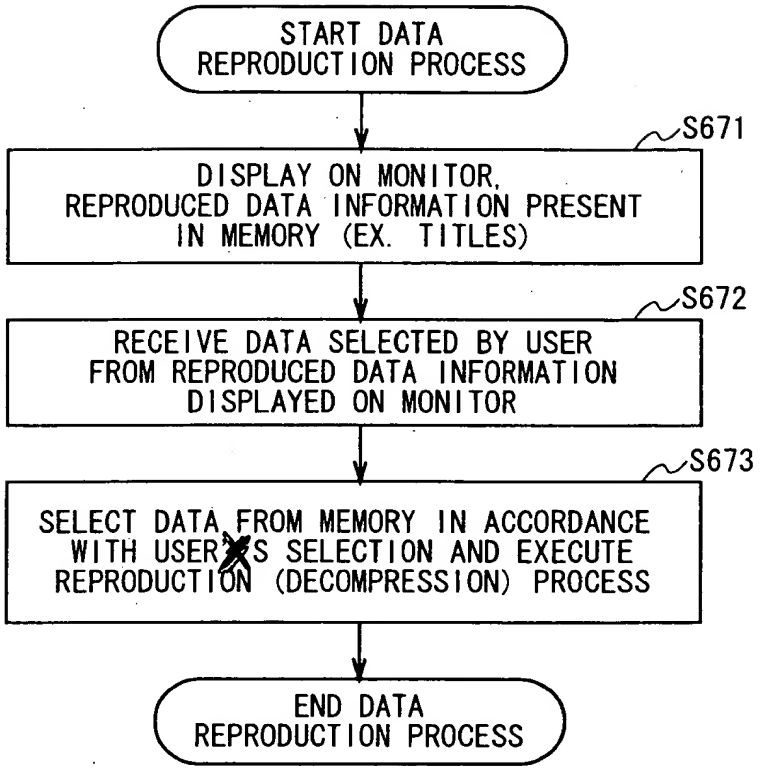


FIG. 62

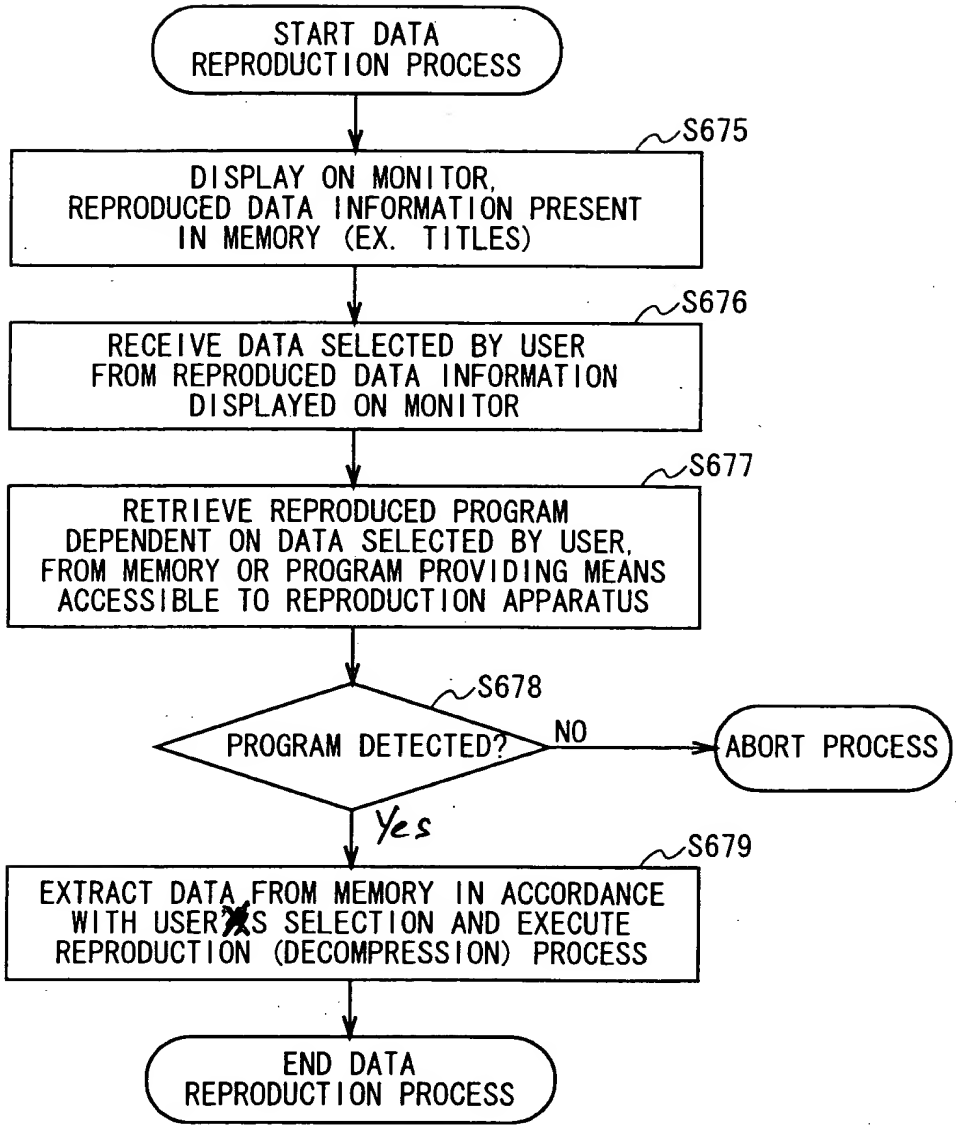


FIG. 64

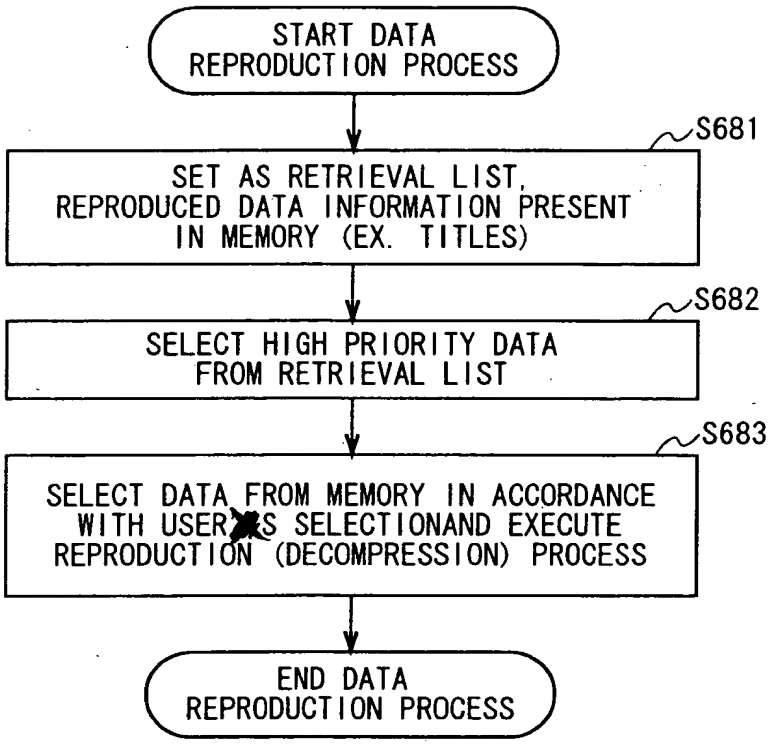


FIG. 66

EXAMPLE OF CONTENT CONFIGURATION (4)

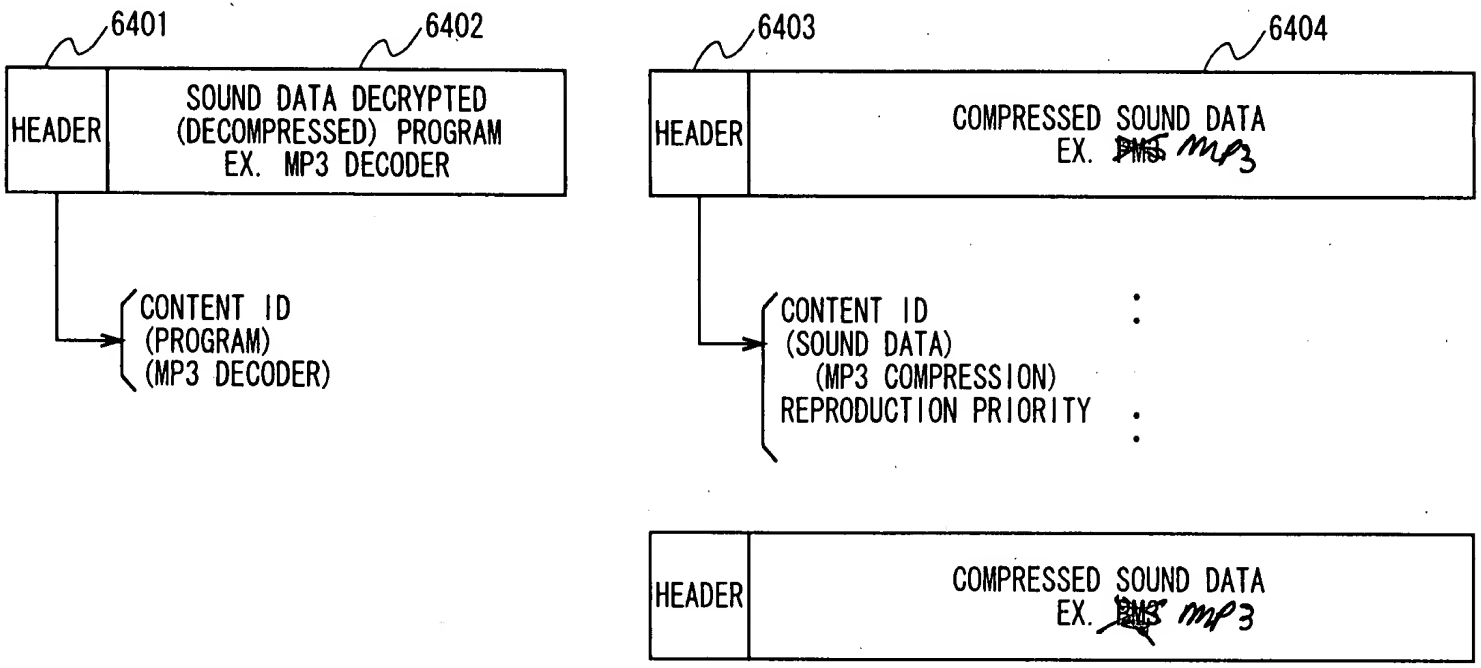


FIG. 67

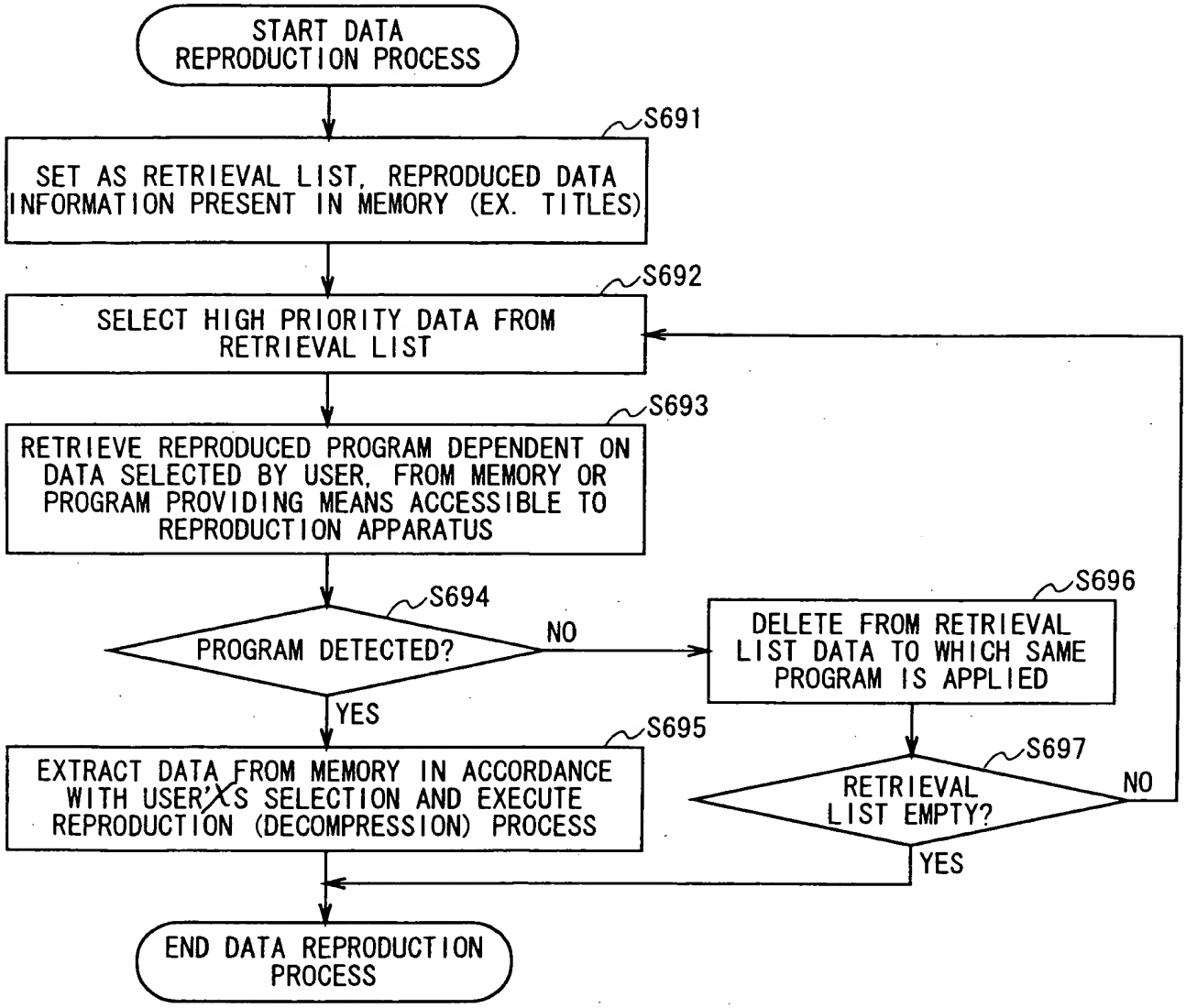


FIG. 68

(2) EXAMPLE OF SAVE DATA REPRODUCTION PROCESS USING CONTENT UNIQUE KEY OR SYSTEM COMMON KEY

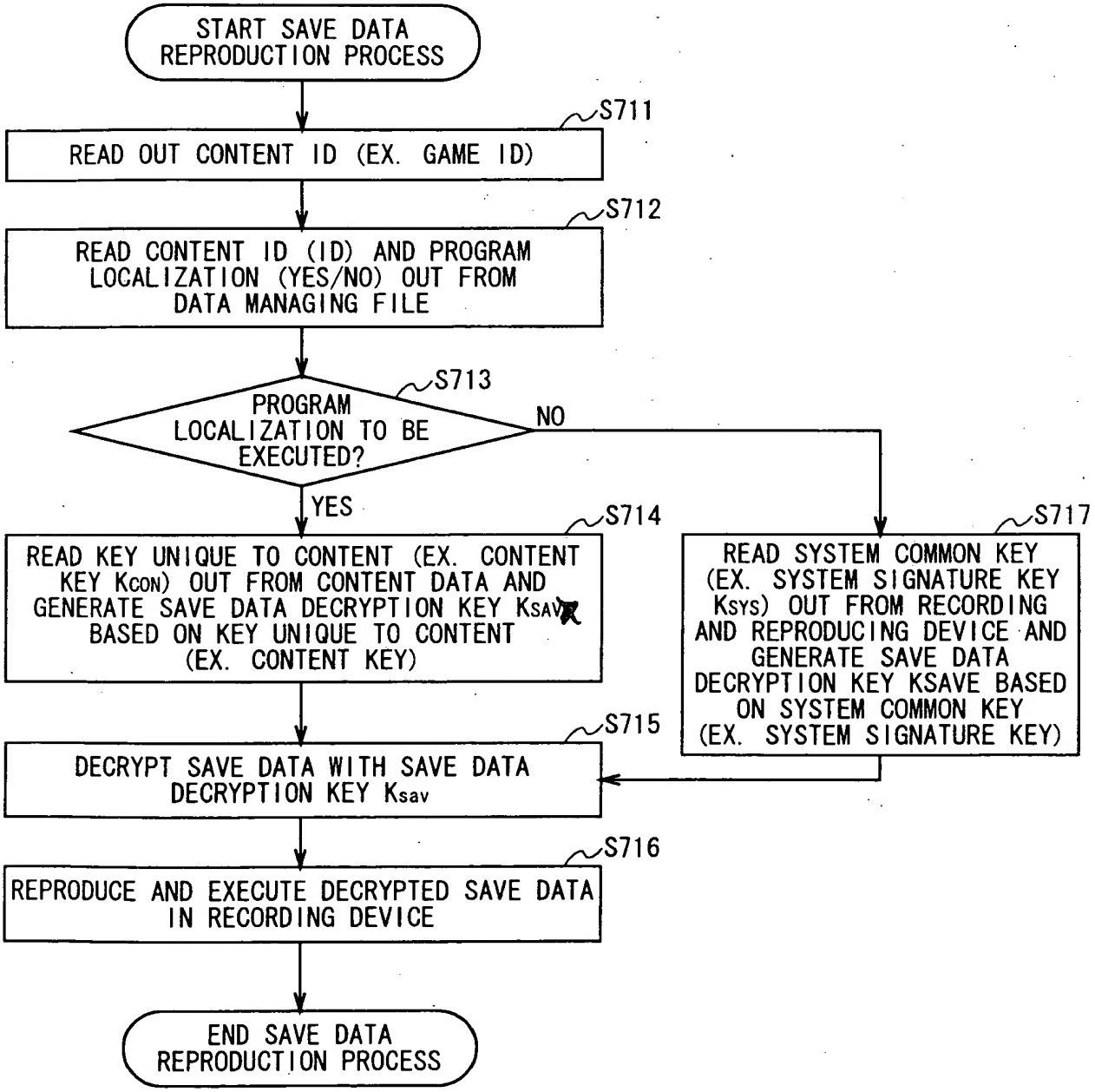


FIG. 72

(3) EXAMPLE OF SAVE DATA STORAGE PROCESS USING CONTENT ID OR SYSTEM COMMON KEY

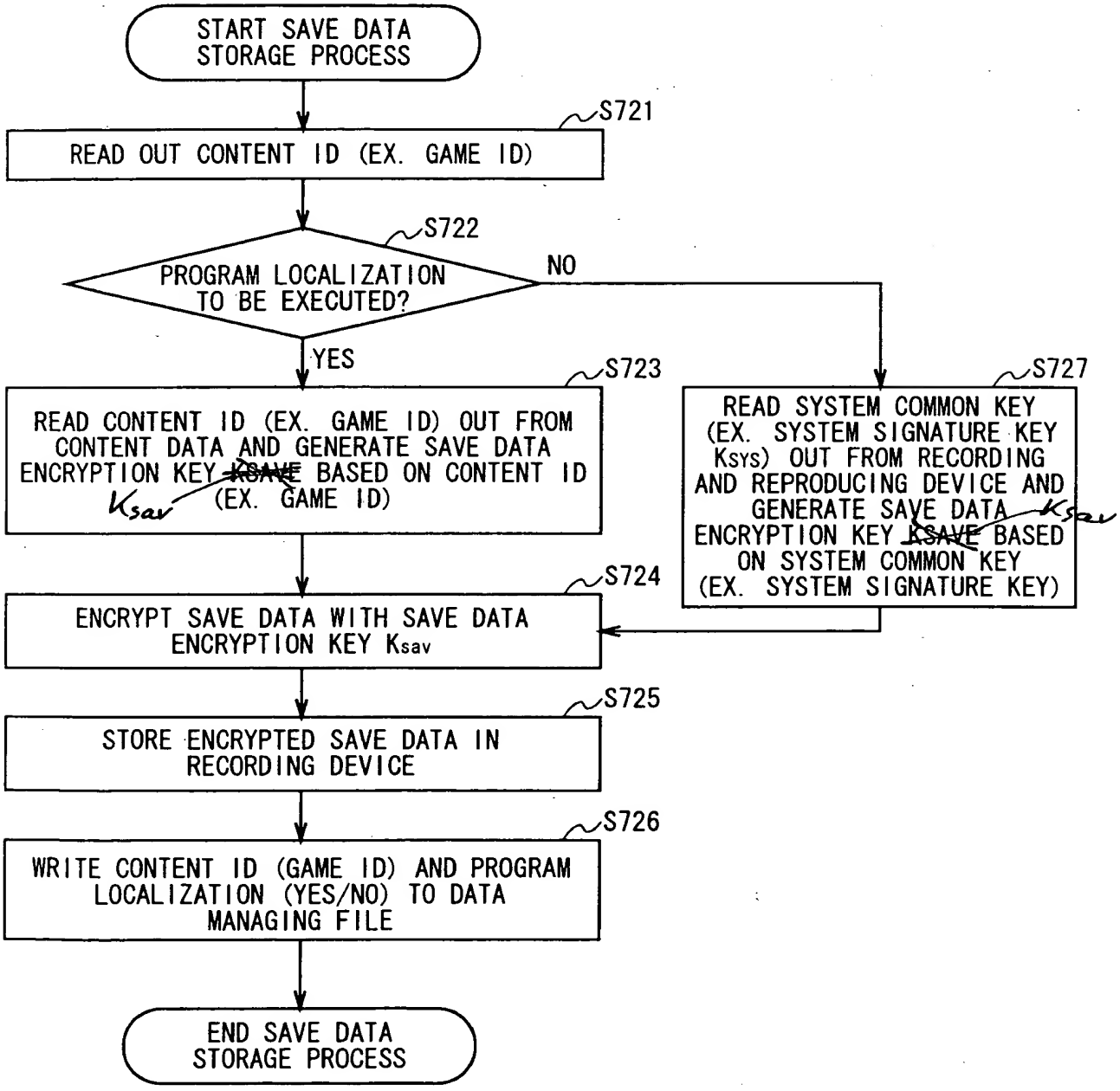


FIG. 73

(4) EXAMPLE OF SAVE DATA REPRODUCTION PROCESS USING CONTENT ID OR SYSTEM COMMON KEY

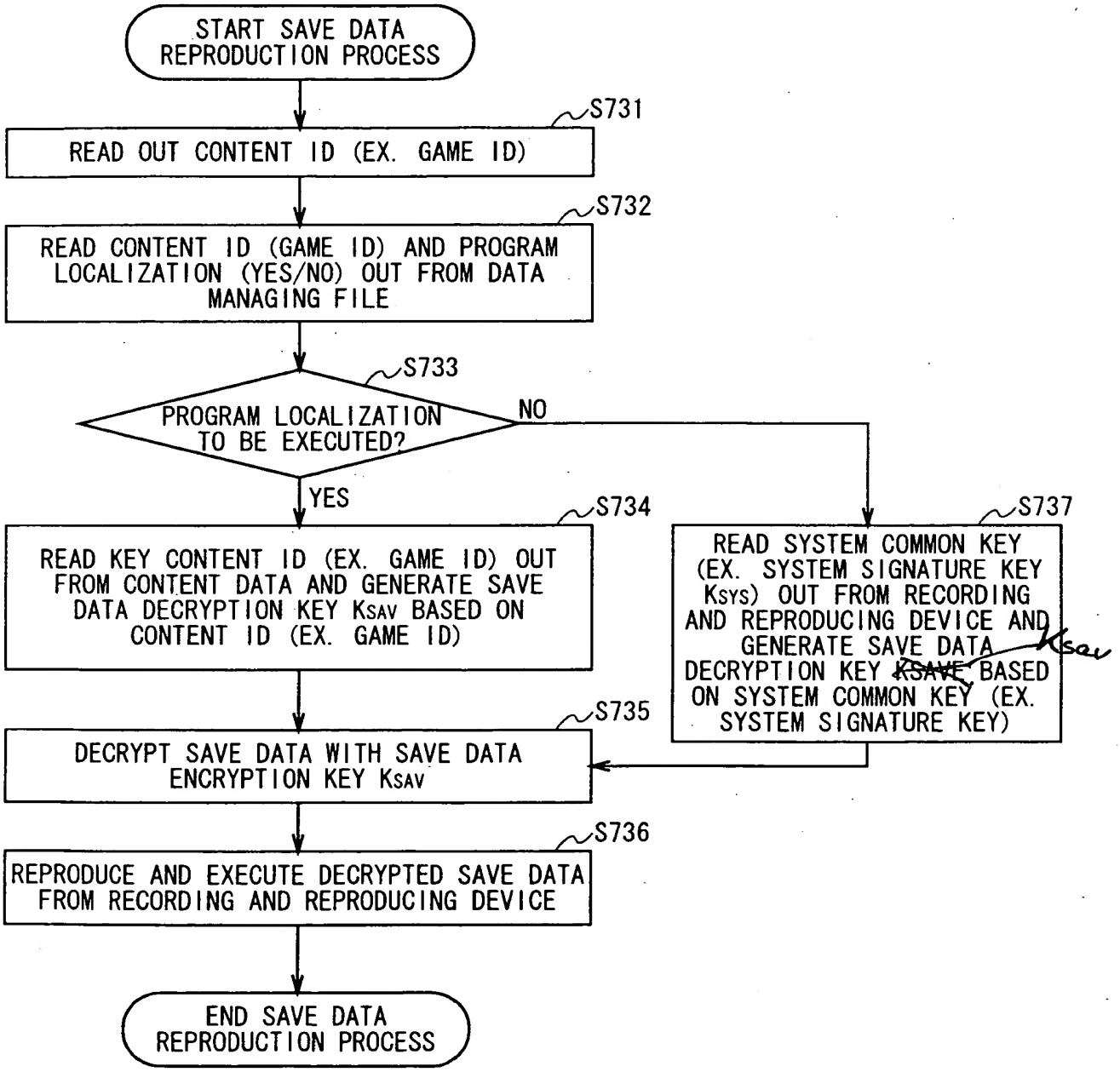


FIG. 74

(5) EXAMPLE OF SAVE DATA STORAGE PROCESS USING RECORDING AND REPRODUCING DEVICE UNIQUE KEY OR SYSTEM COMMON KEY

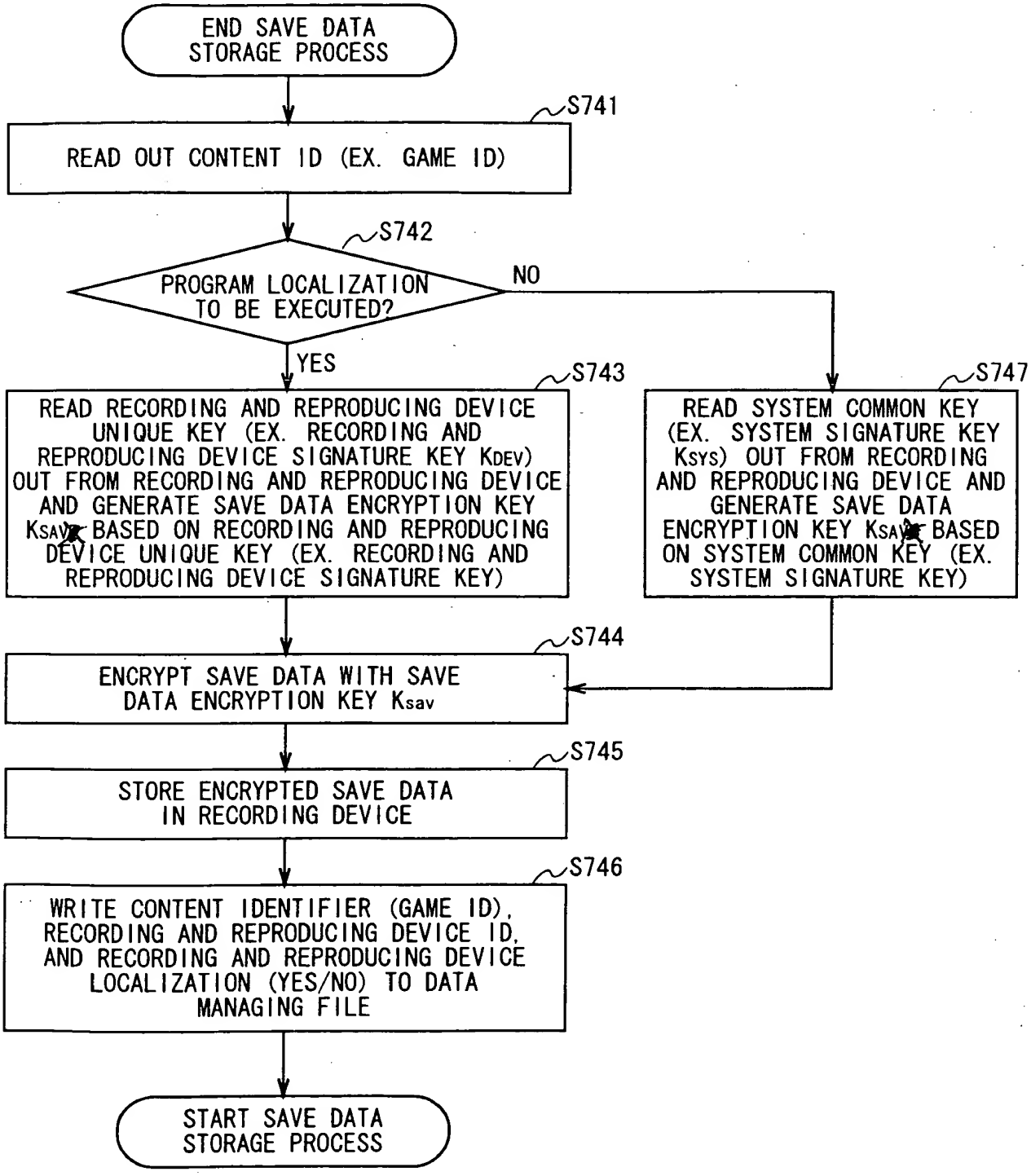


FIG. 75

(6) EXAMPLE OF SAVE DATA REPRODUCTION PROCESS USING RECORDING AND REPRODUCING DEVICE UNIQUE KEY OR SYSTEM COMMON KEY

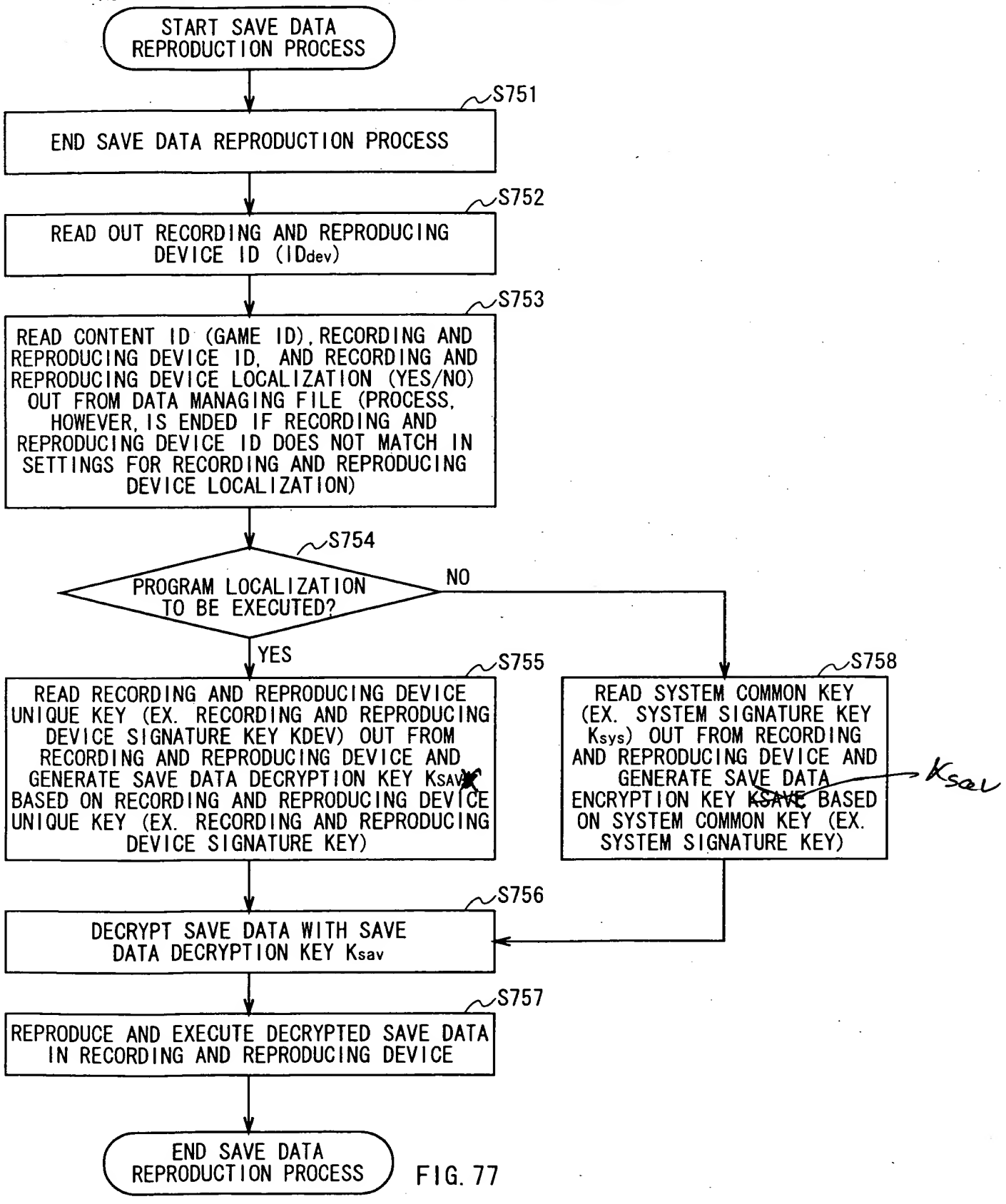


FIG. 77

(7) EXAMPLE OF SAVE DATA STORAGE PROCESS USING RECORDING AND REPRODUCING DEVICE ID OR SYSTEM COMMON KEY

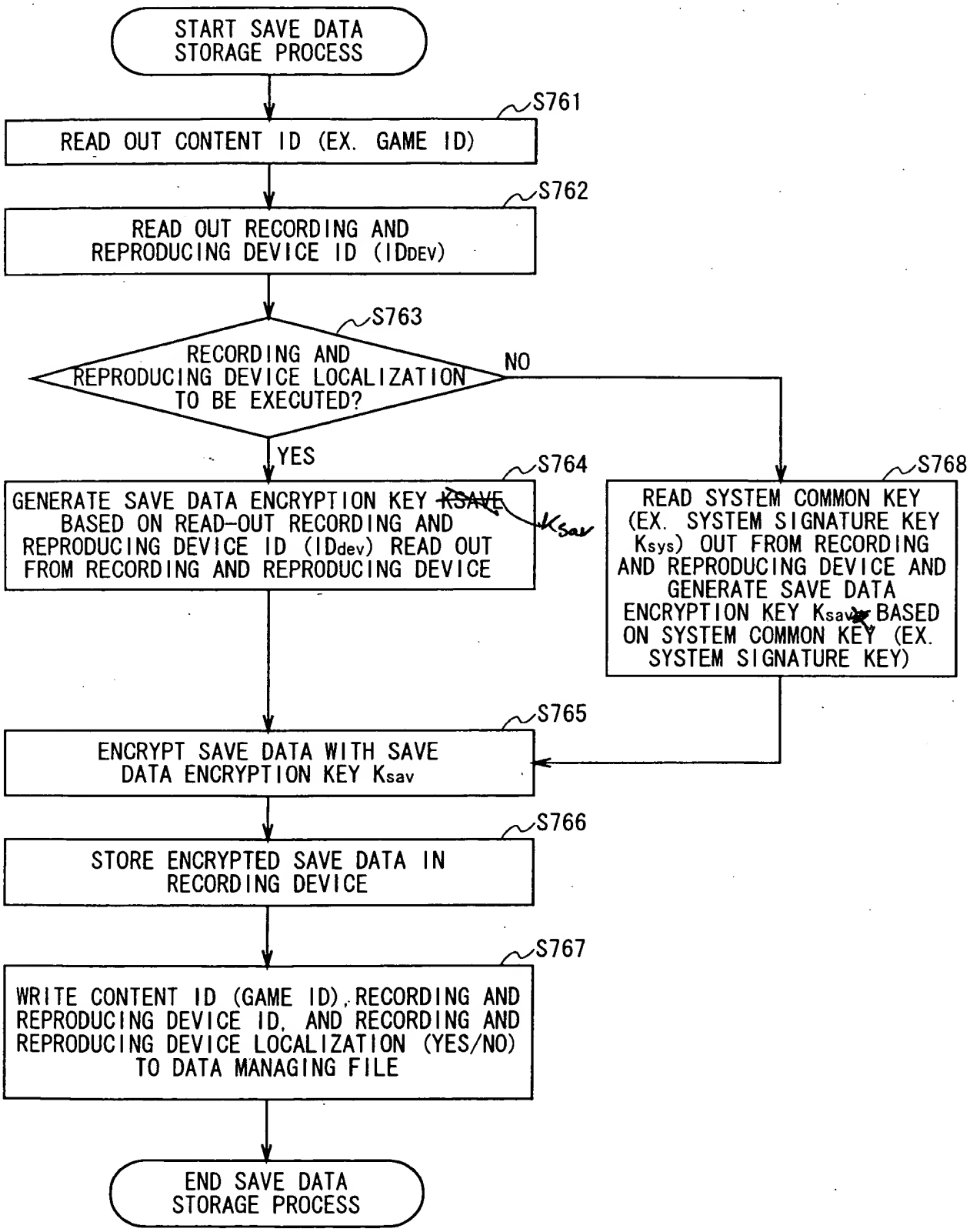


FIG. 78

(8) EXAMPLE OF SAVE DATA REPRODUCTION PROCESS USING RECORDING AND REPRODUCING DEVICE ID OR SYSTEM COMMON KEY

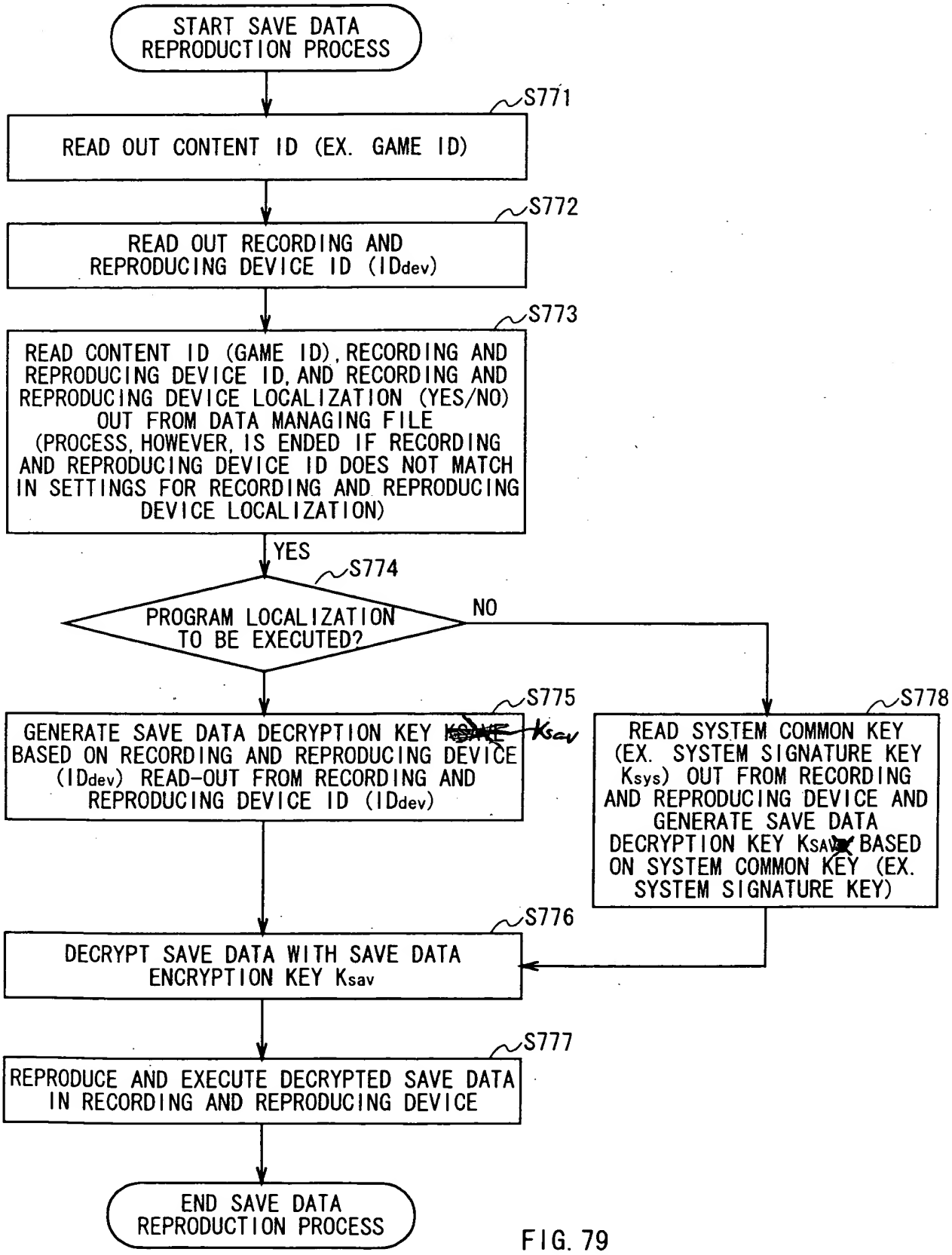


FIG. 79

(9) EXAMPLE OF SAVE DATA STORAGE PROCESS USING CONTENT UNIQUE KEY, RECORDING AND REPRODUCING DEVICE UNIQUE KEY, OR SYSTEM COMMON KEY

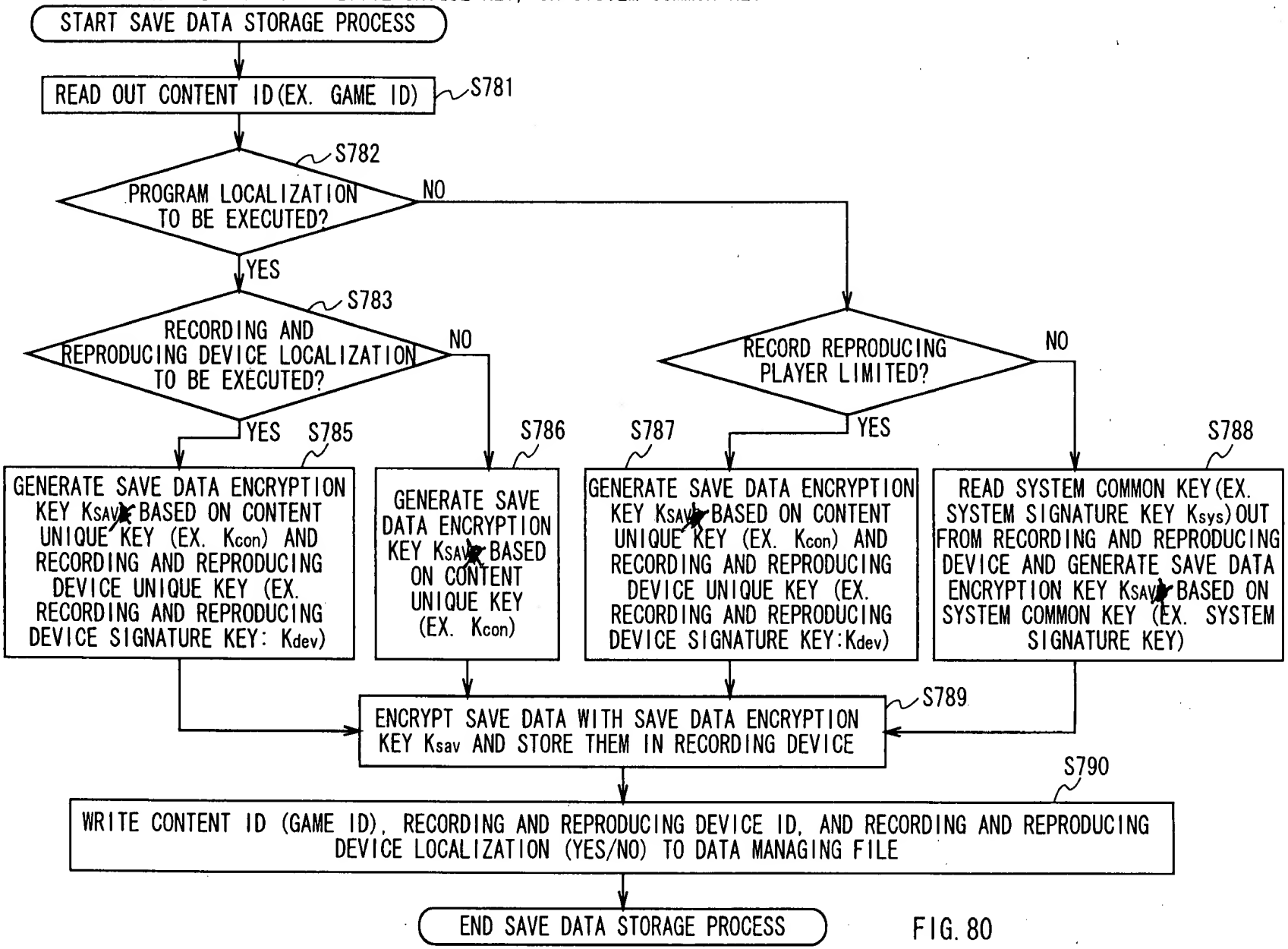


FIG. 80

(10) EXAMPLE OF SAVE DATA REPRODUCTION PROCESS USING CONTENT UNIQUE KEY, RECORDING AND REPRODUCING DEVICE UNIQUE KEY, OR SYSTEM COMMON KEY

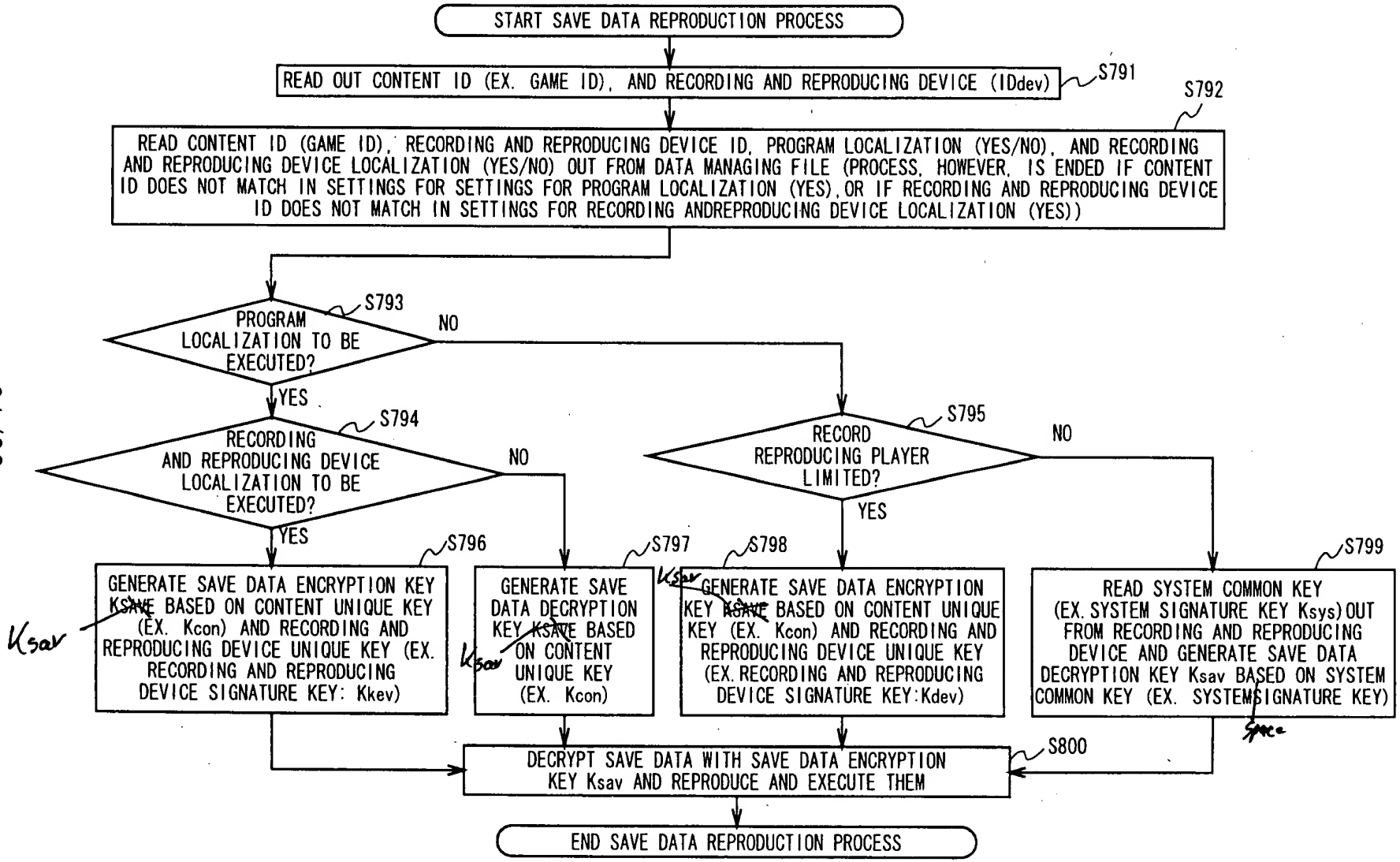


FIG. 82

(12) EXAMPLE OF SAVE DATA REPRODUCTION PROCESS USING USER PASSWORD OR SYSTEM COMMON KEY

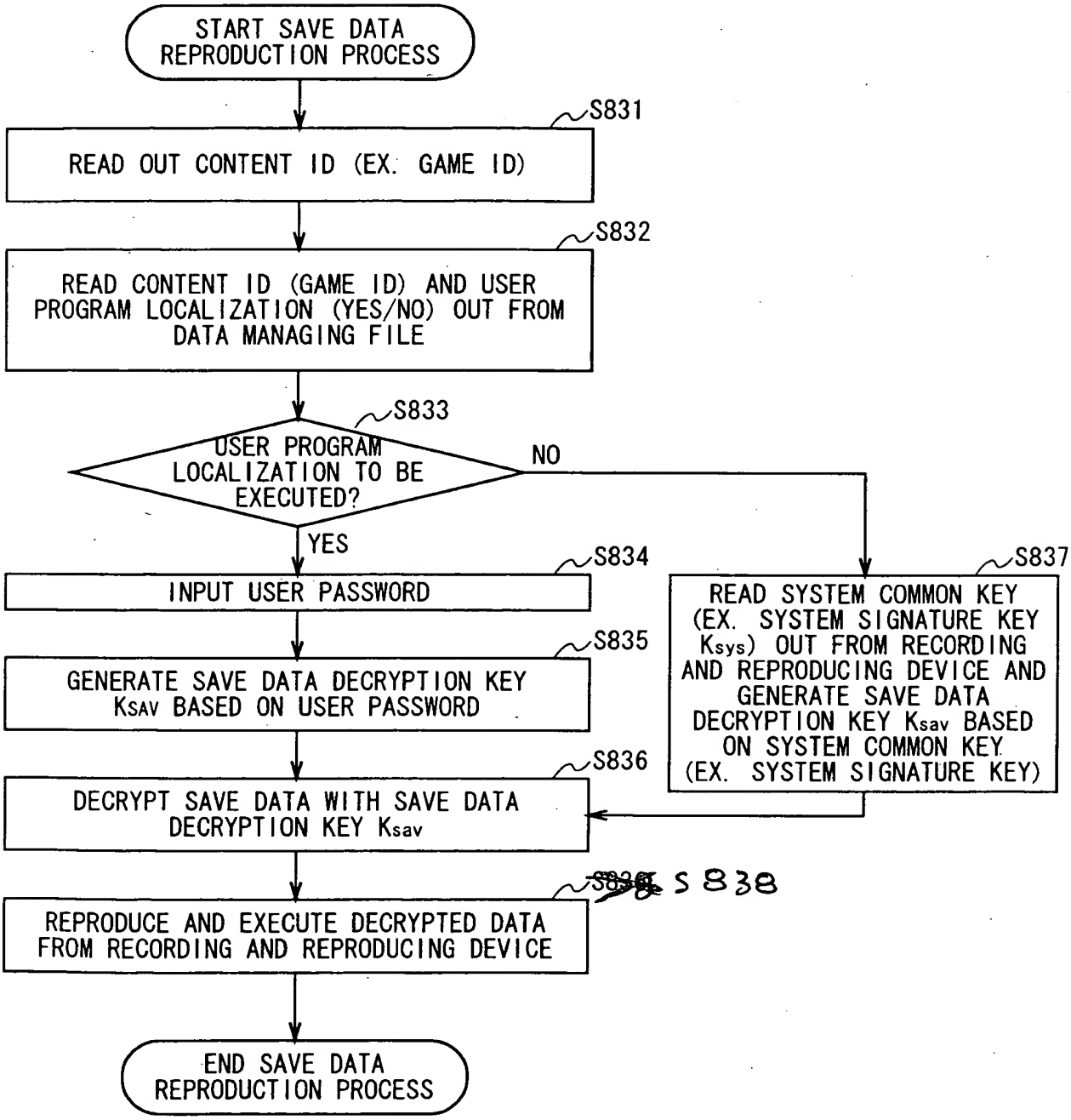


FIG. 85

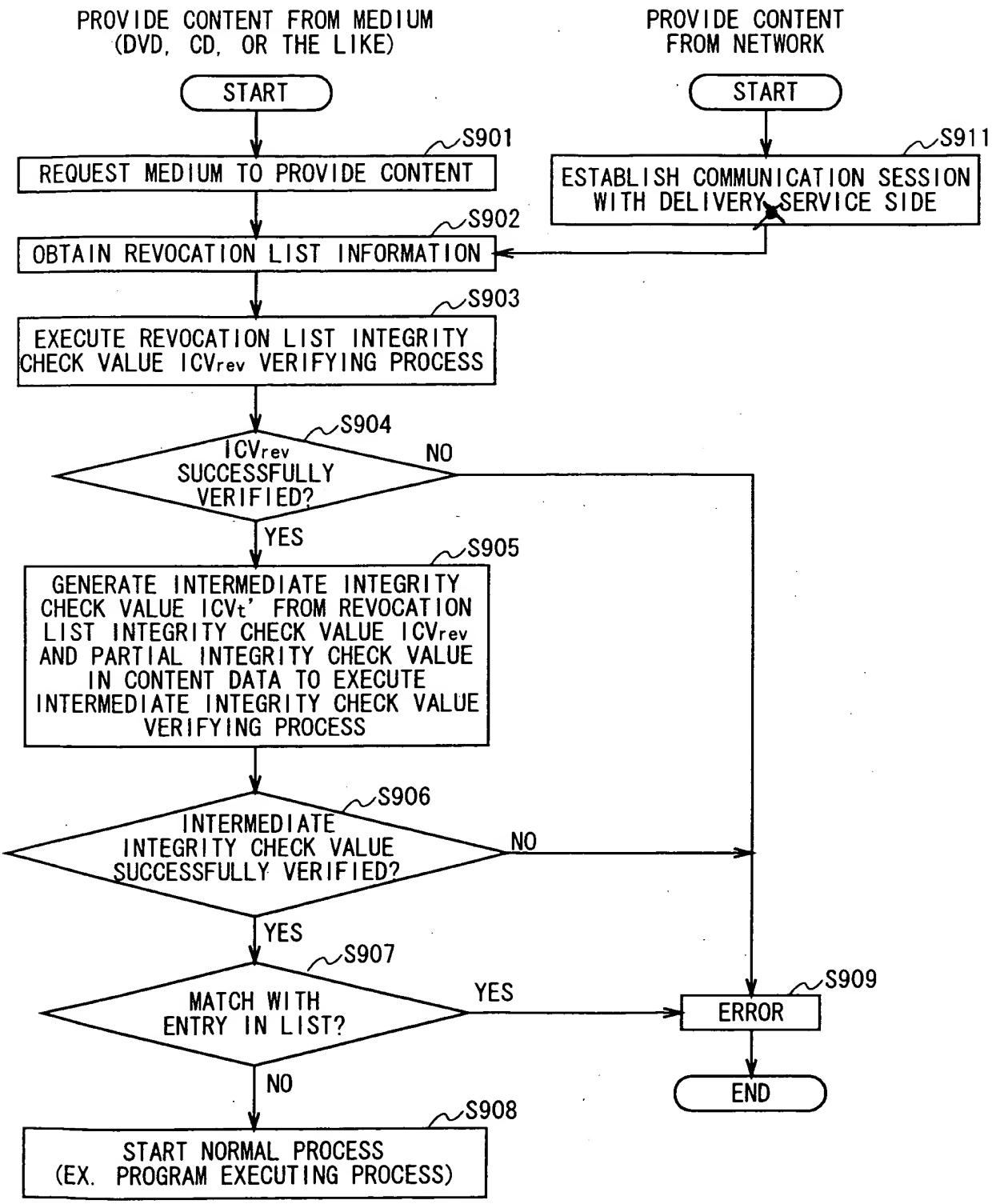


FIG. 87

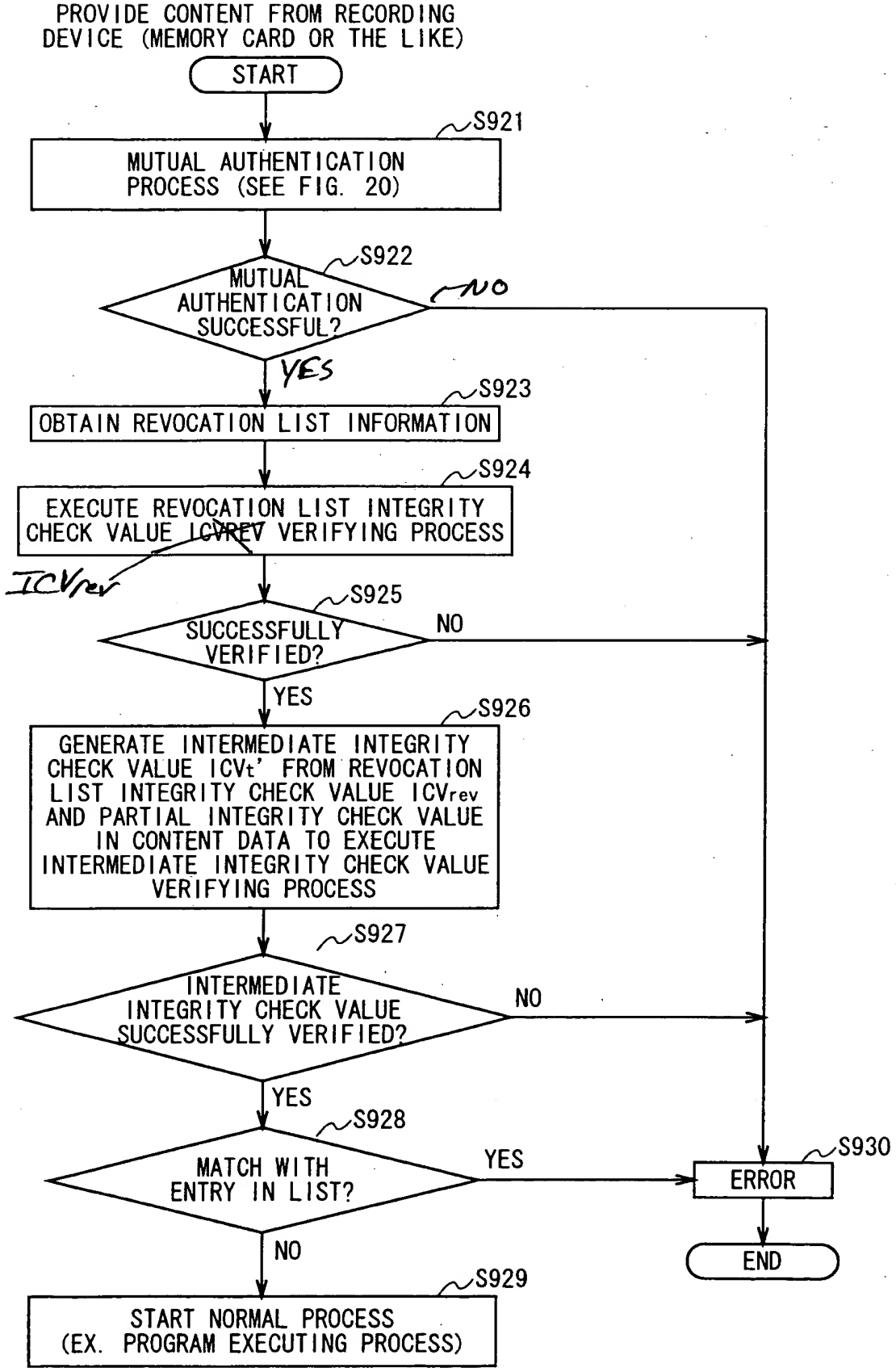


FIG. 88